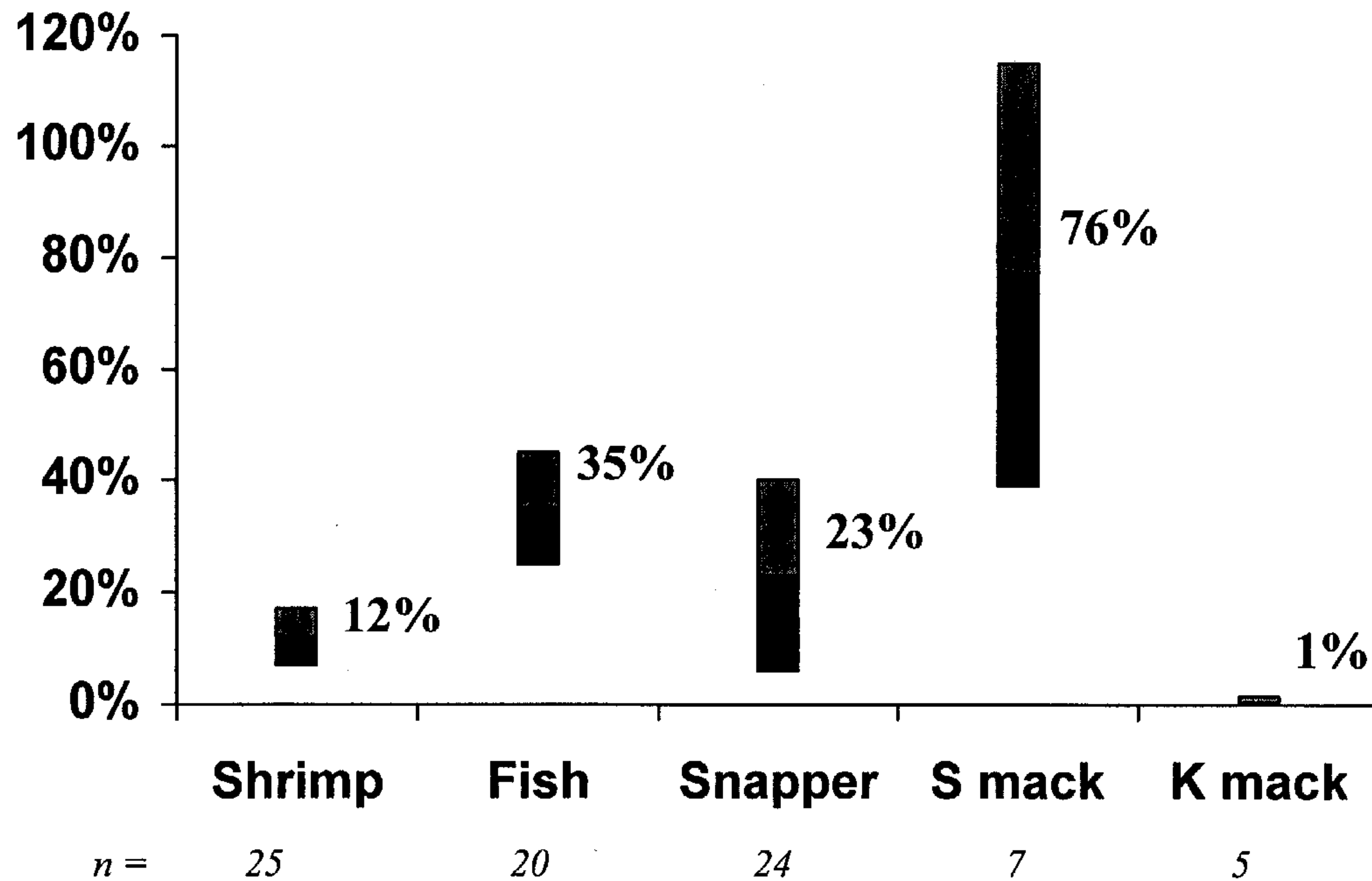
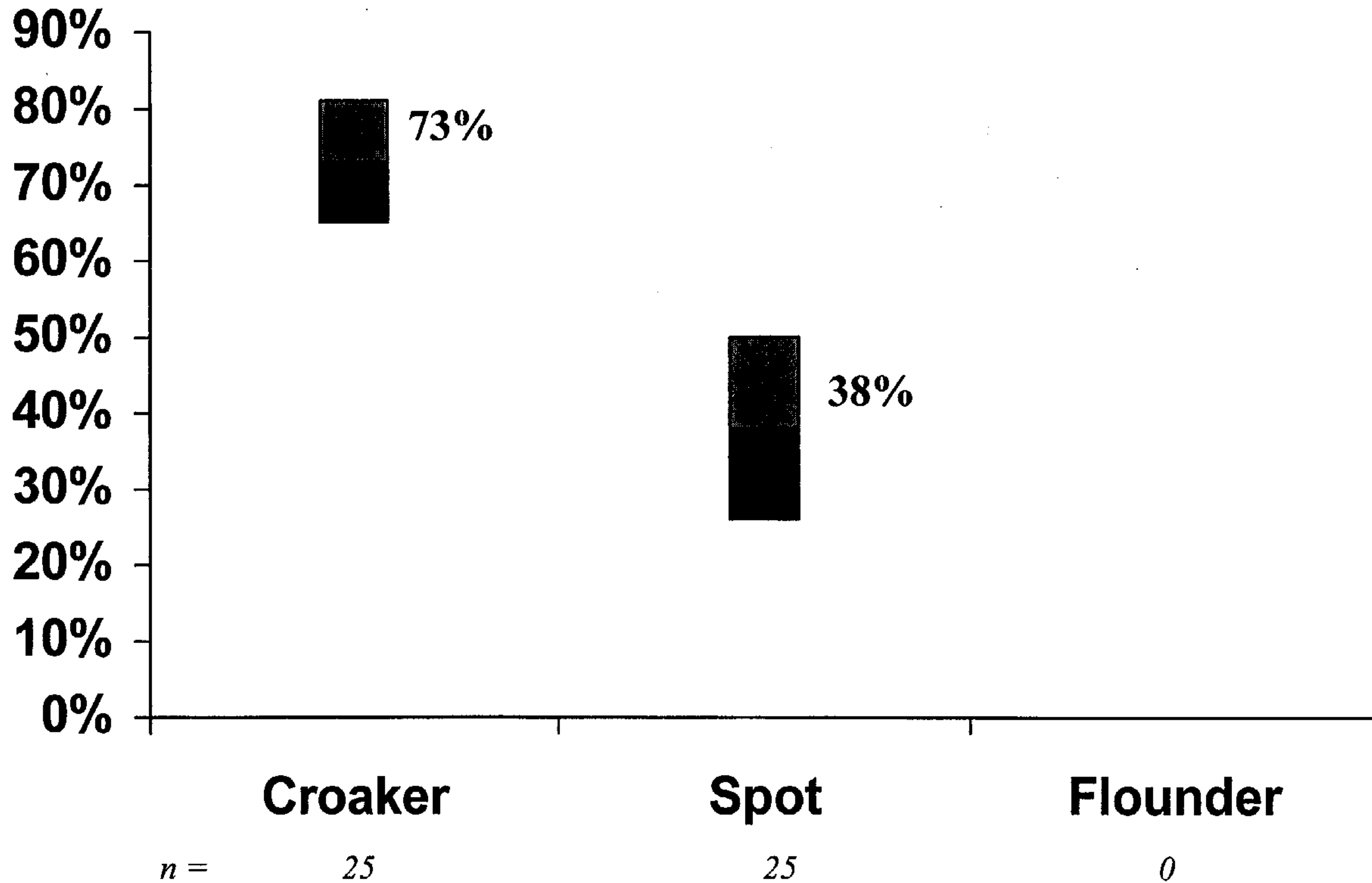


MORRISON TED REDUCTION RATES (GOM)

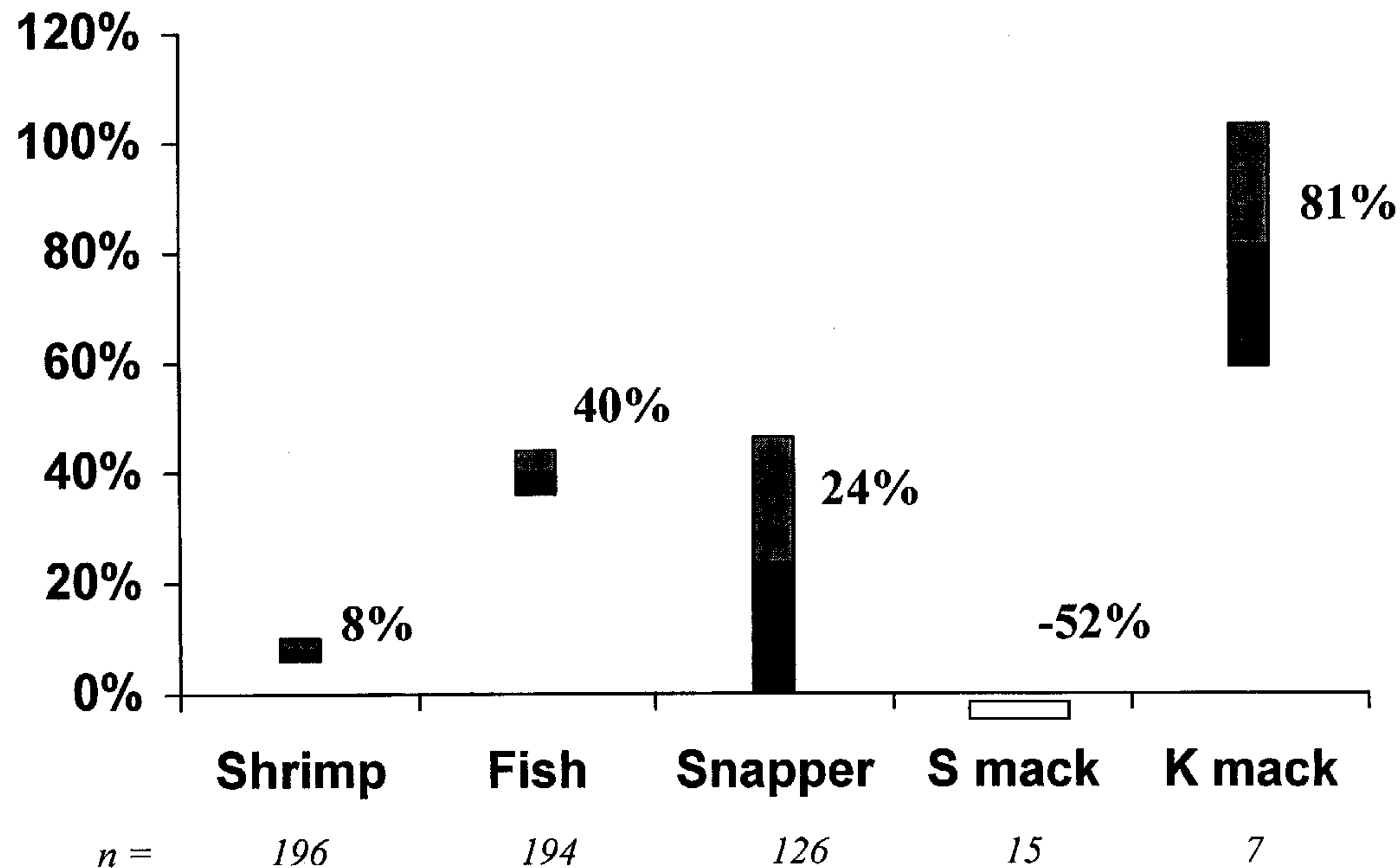


MORRISON TED

REDUCTION RATES (GOM)

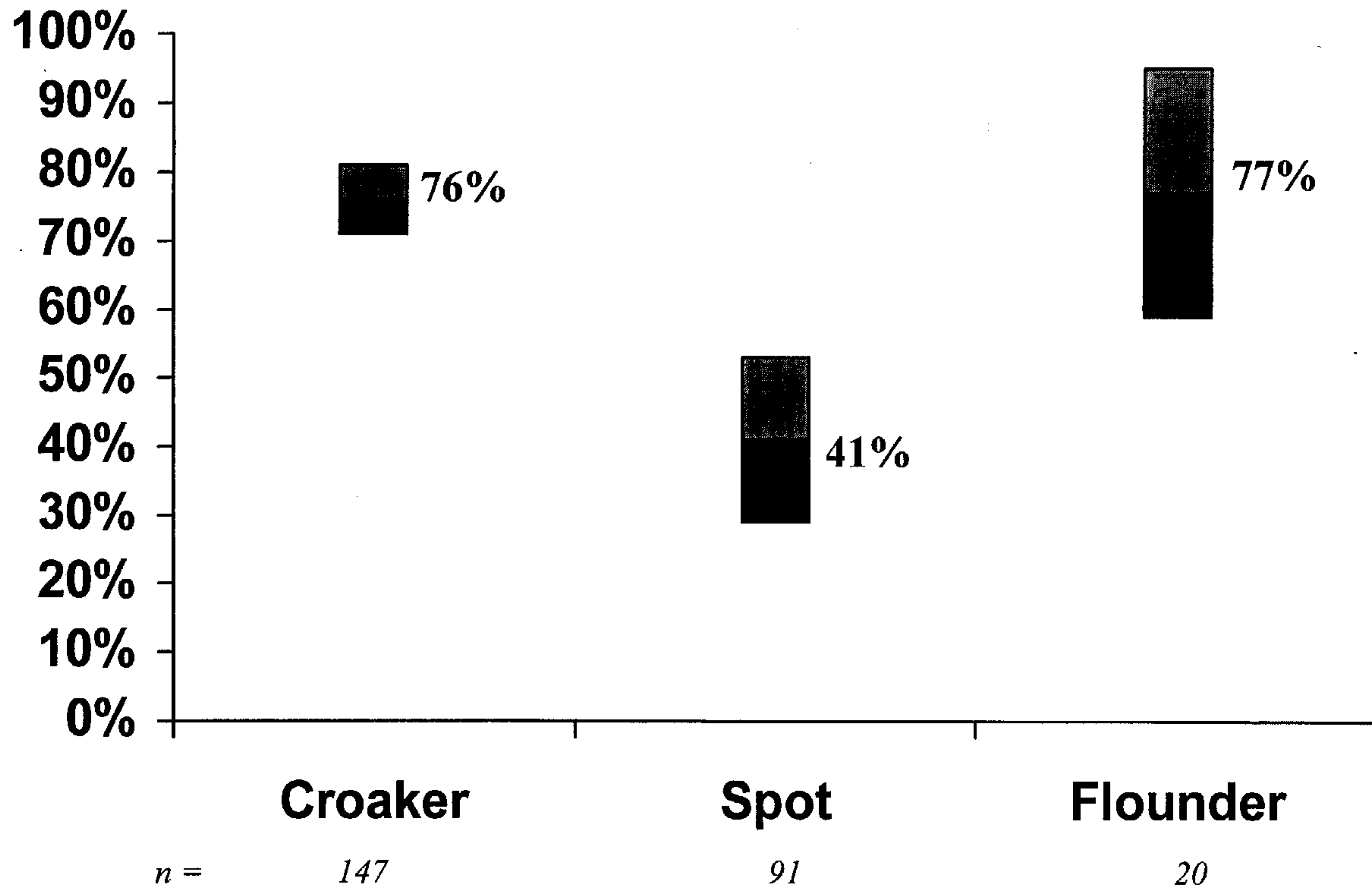


FRONT FISHEYE (12X5), SS TED REDUCTION RATES (GOM)

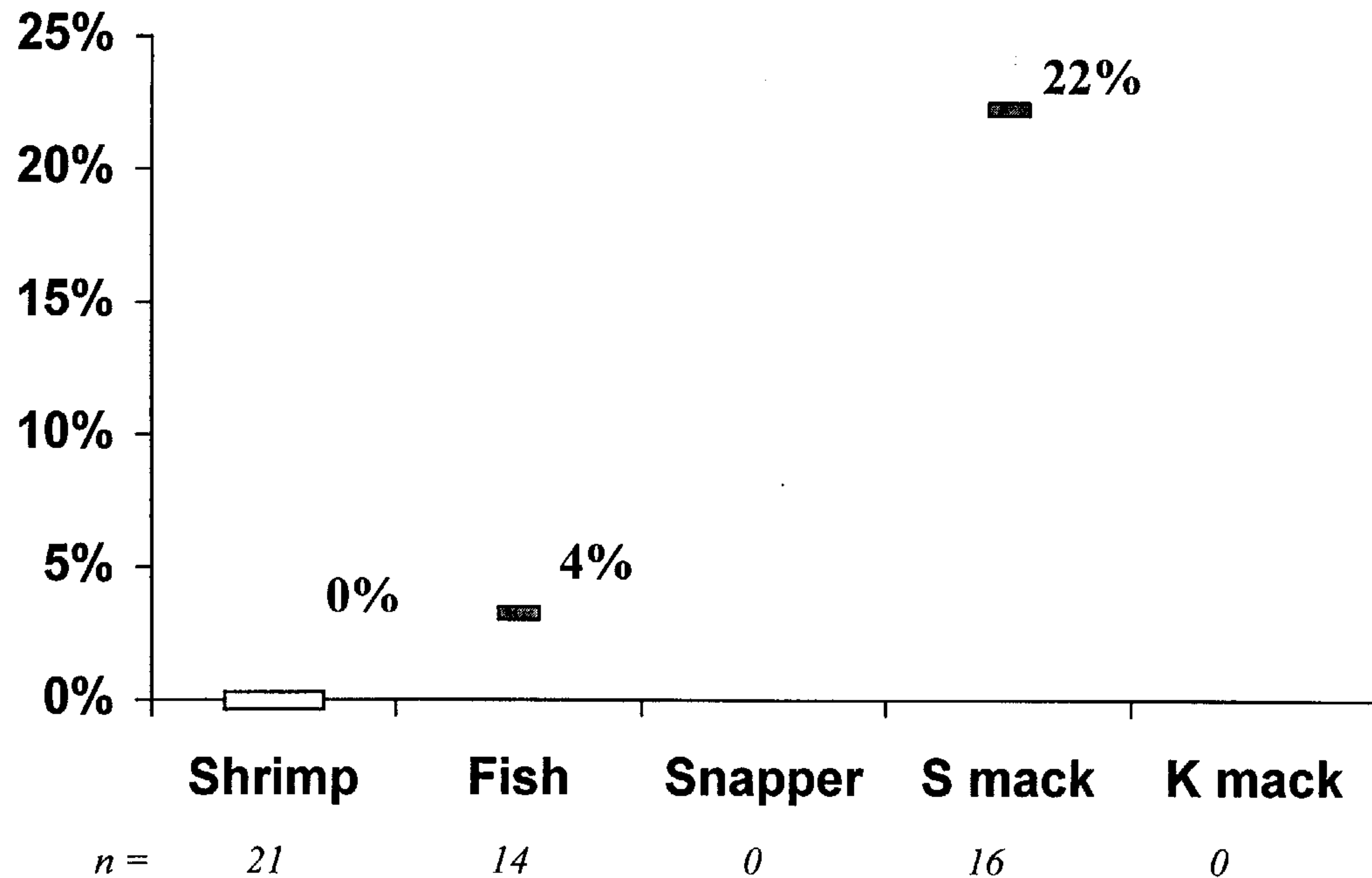


FRONT FISHEYE (12X5), SS TED

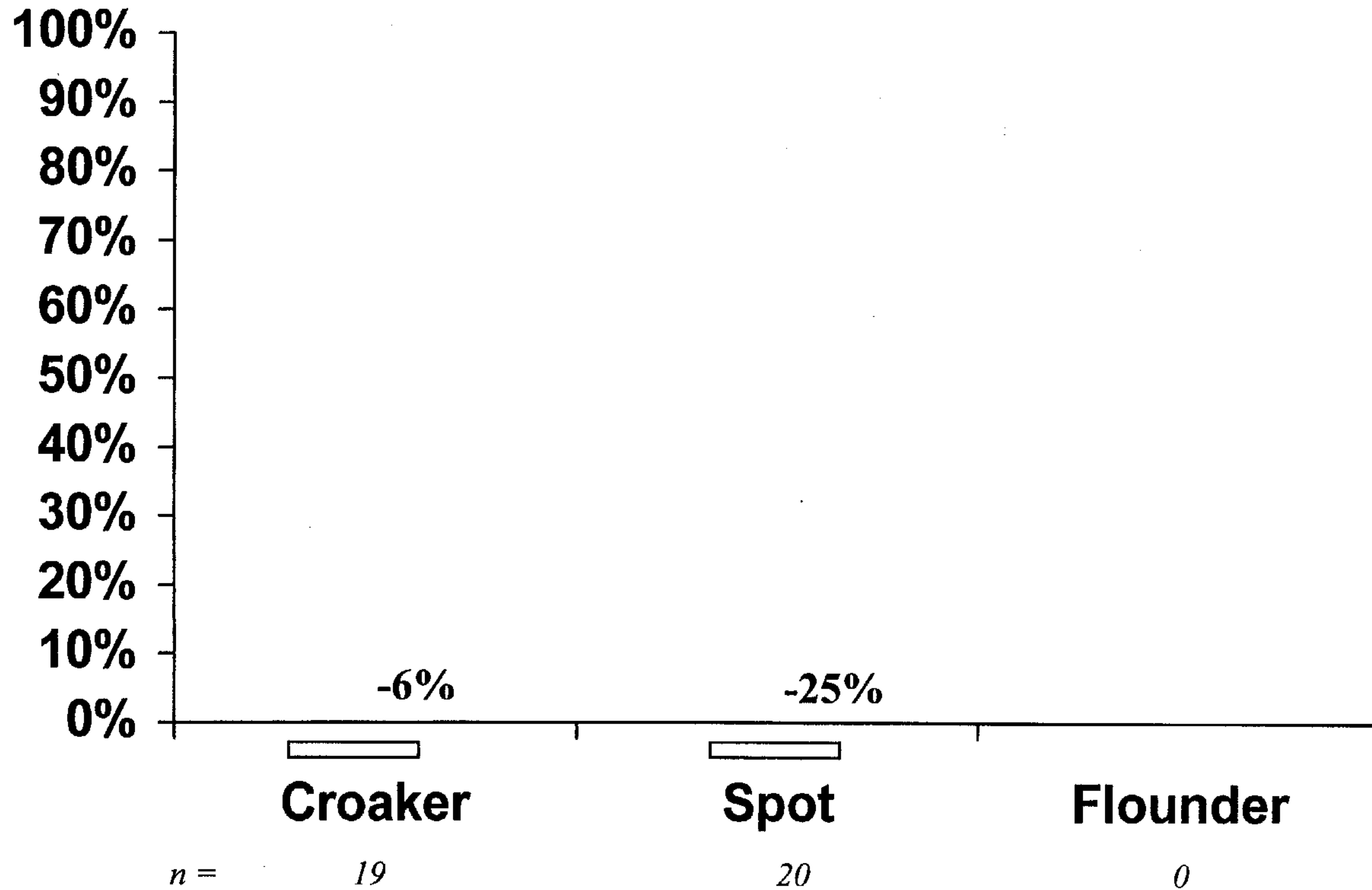
REDUCTION RATES (GOM)



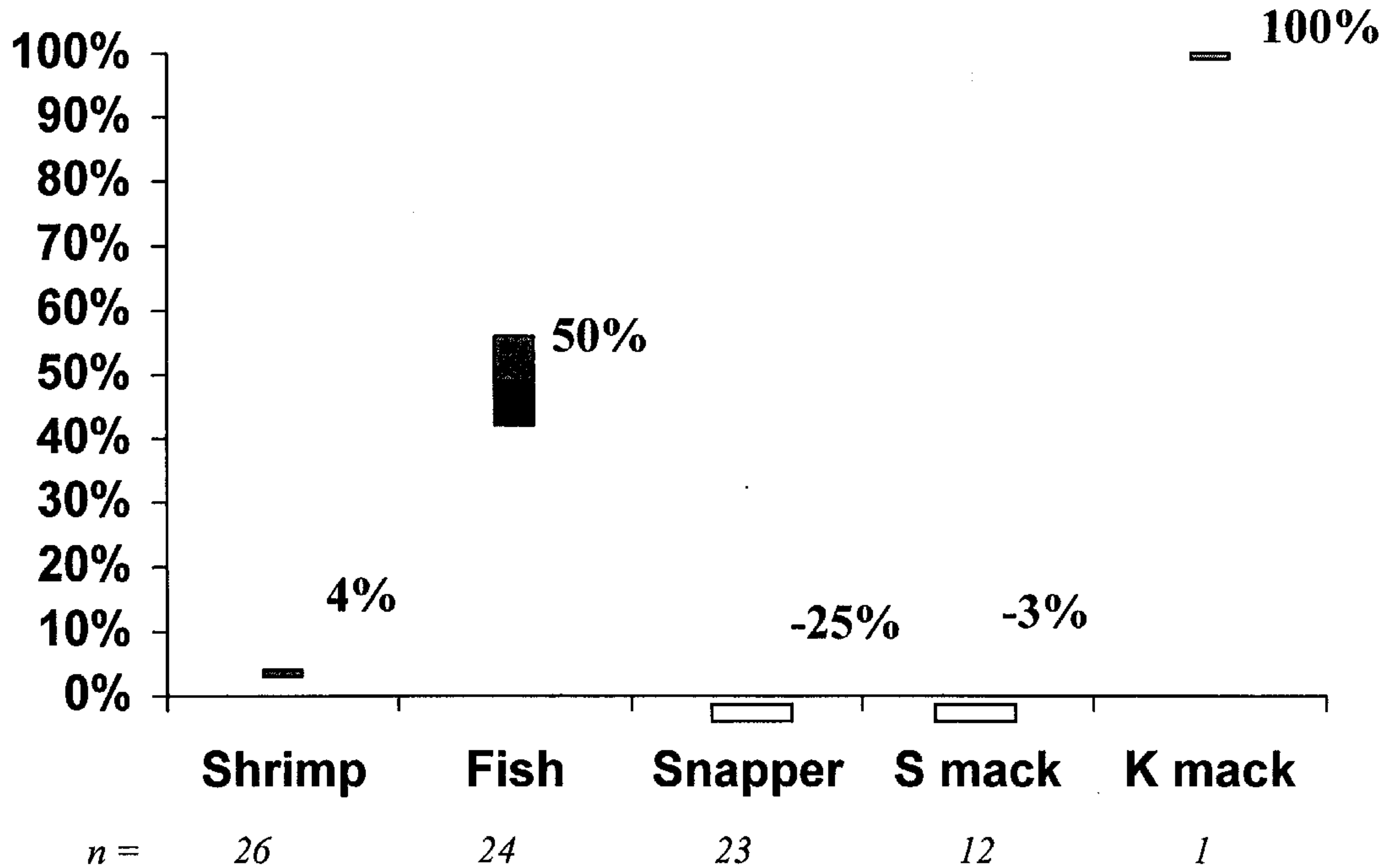
REAR FISHEYE (4X7), SS TED REDUCTION RATES (GOM)



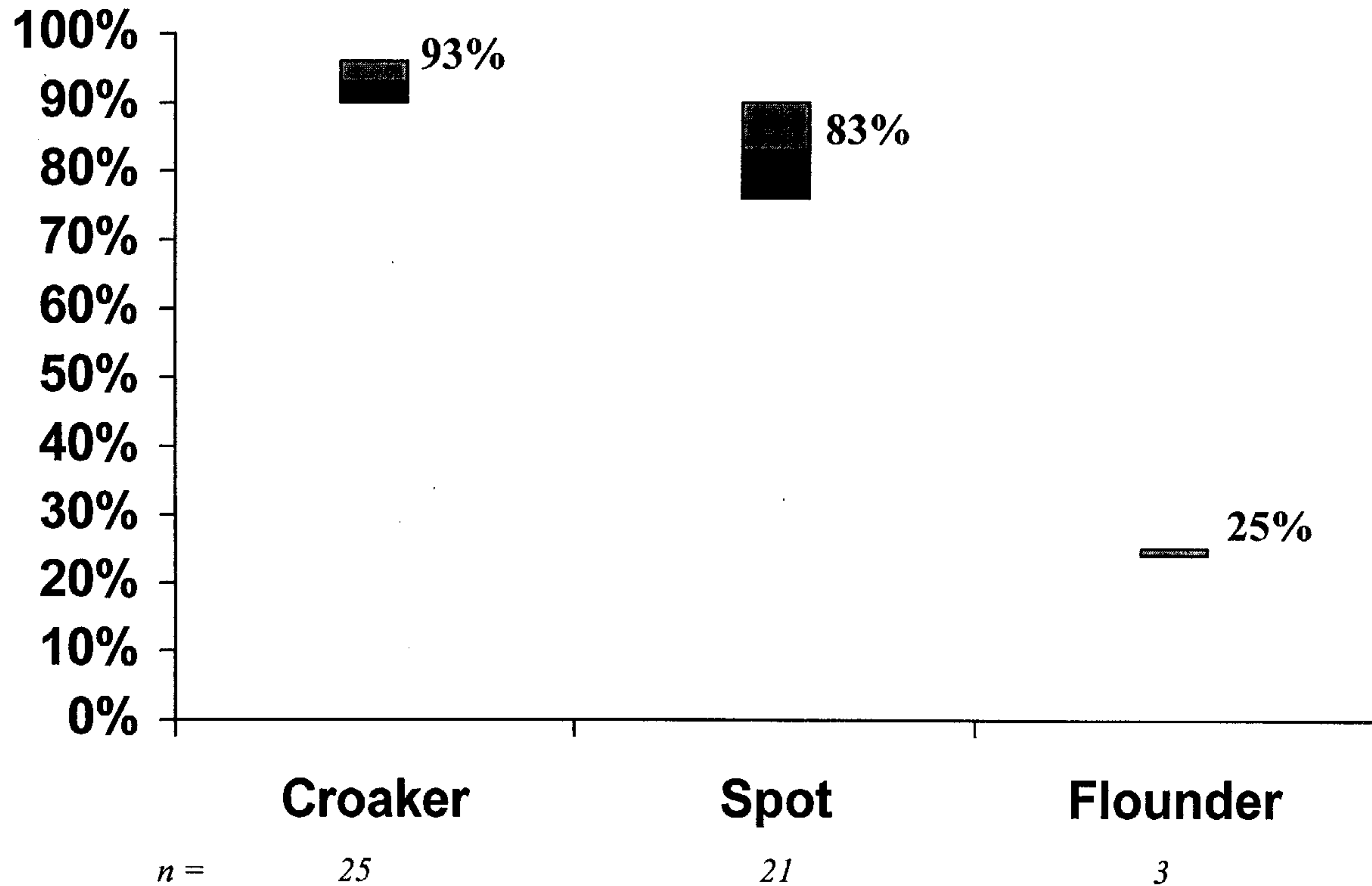
REAR FISHEYE (4X7), SS TED REDUCTION RATES (GOM)



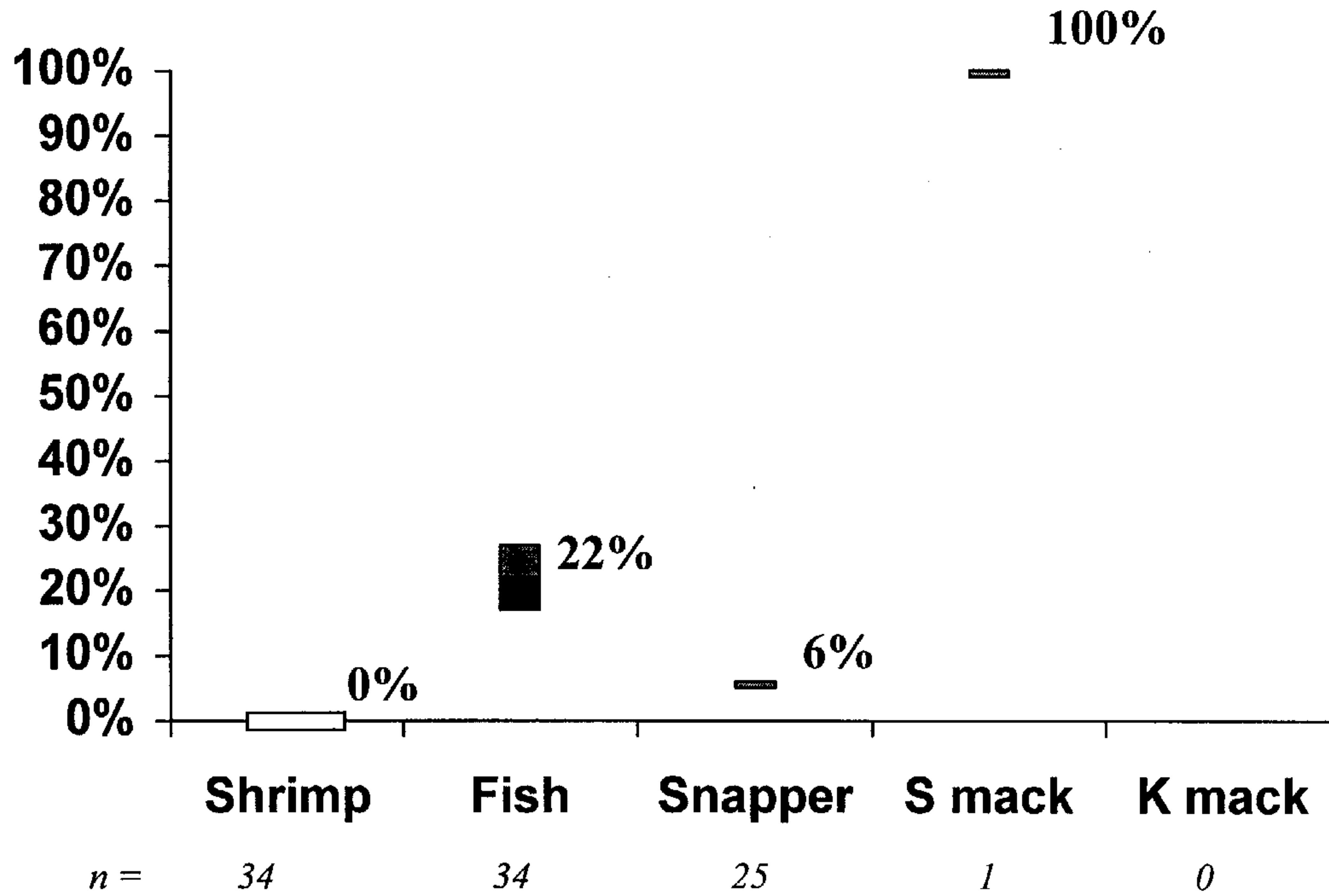
SIDE FISHEYES (12X5), SS TED REDUCTION RATES (GOM)



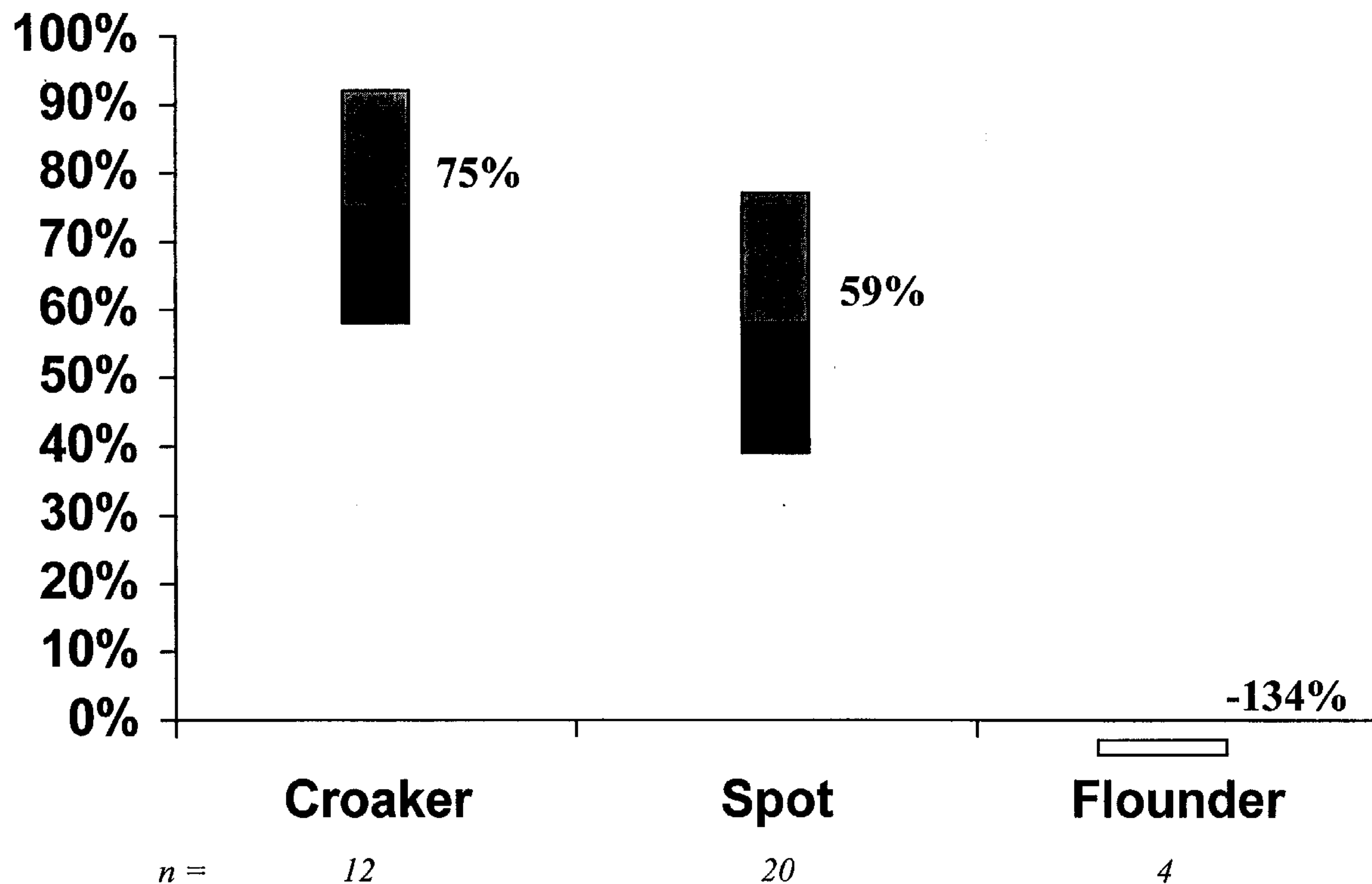
SIDE FISHEYES (12X5), SS TED REDUCTION RATES (GOM)



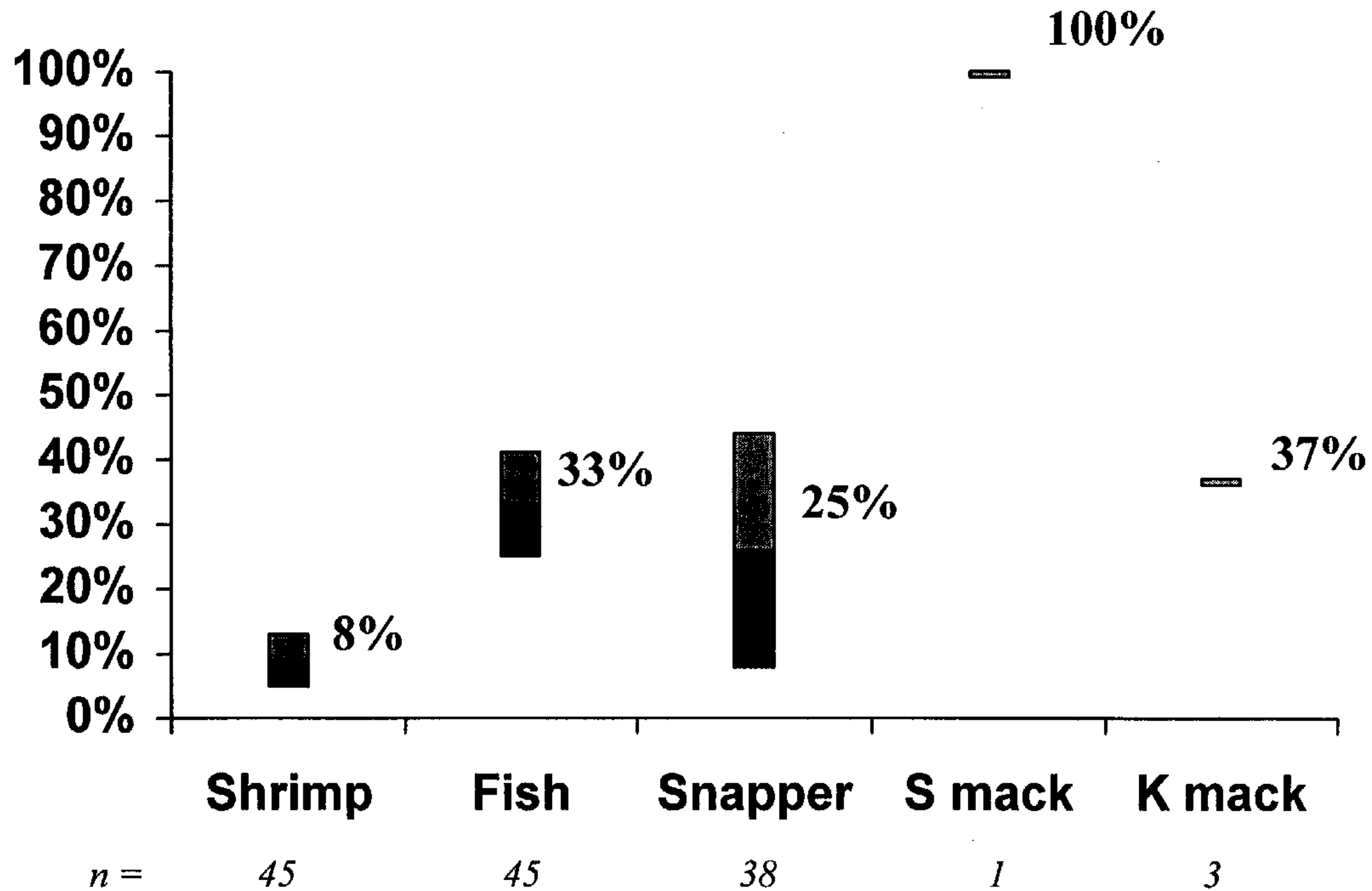
SIDE OPENING SS TED REDUCTION RATES (GOM)



SIDE OPENING SS TED REDUCTION RATES (GOM)

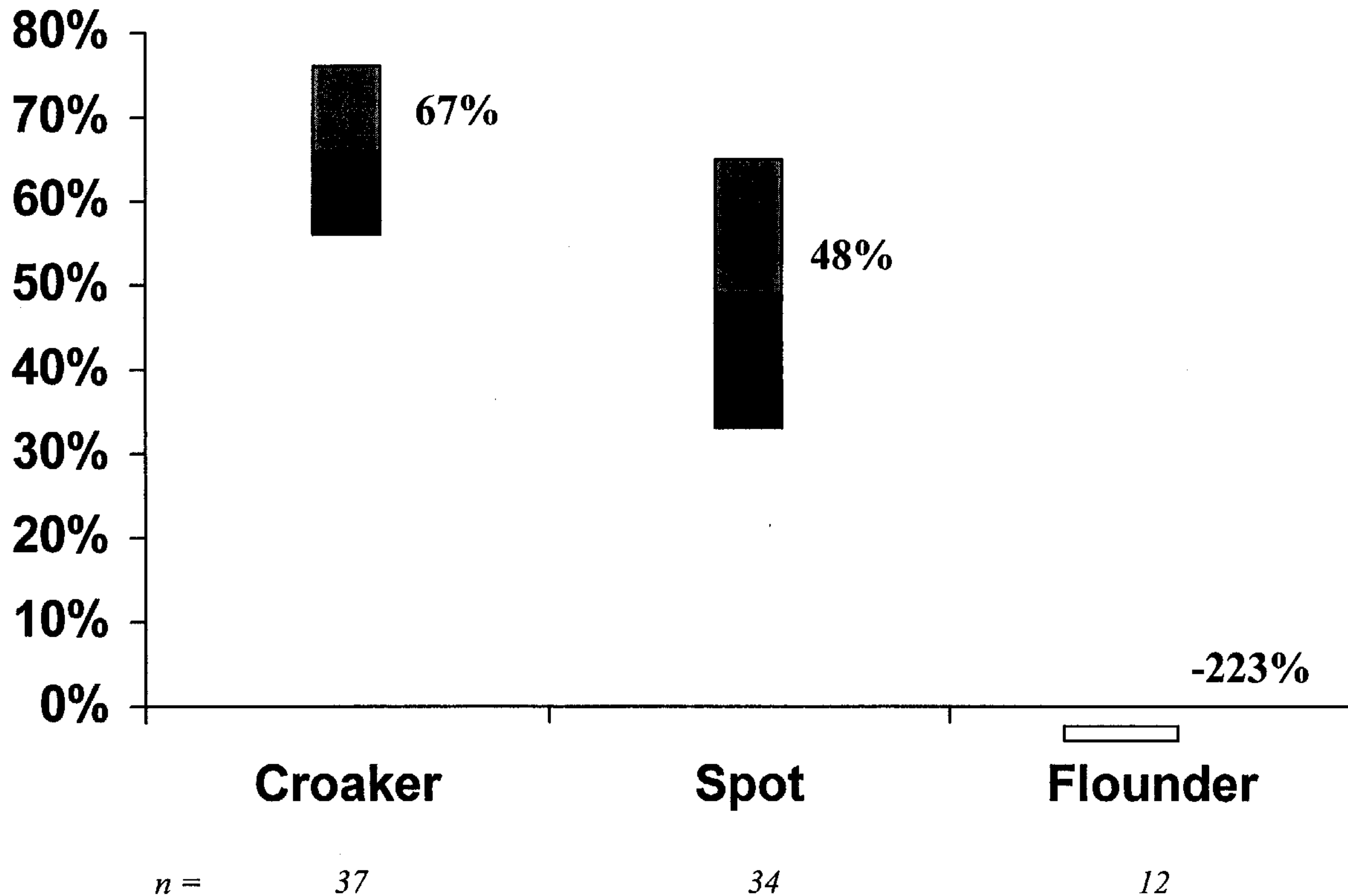


OFFSET FISHEYE (12X5), SS TED REDUCTION RATES (GOM)

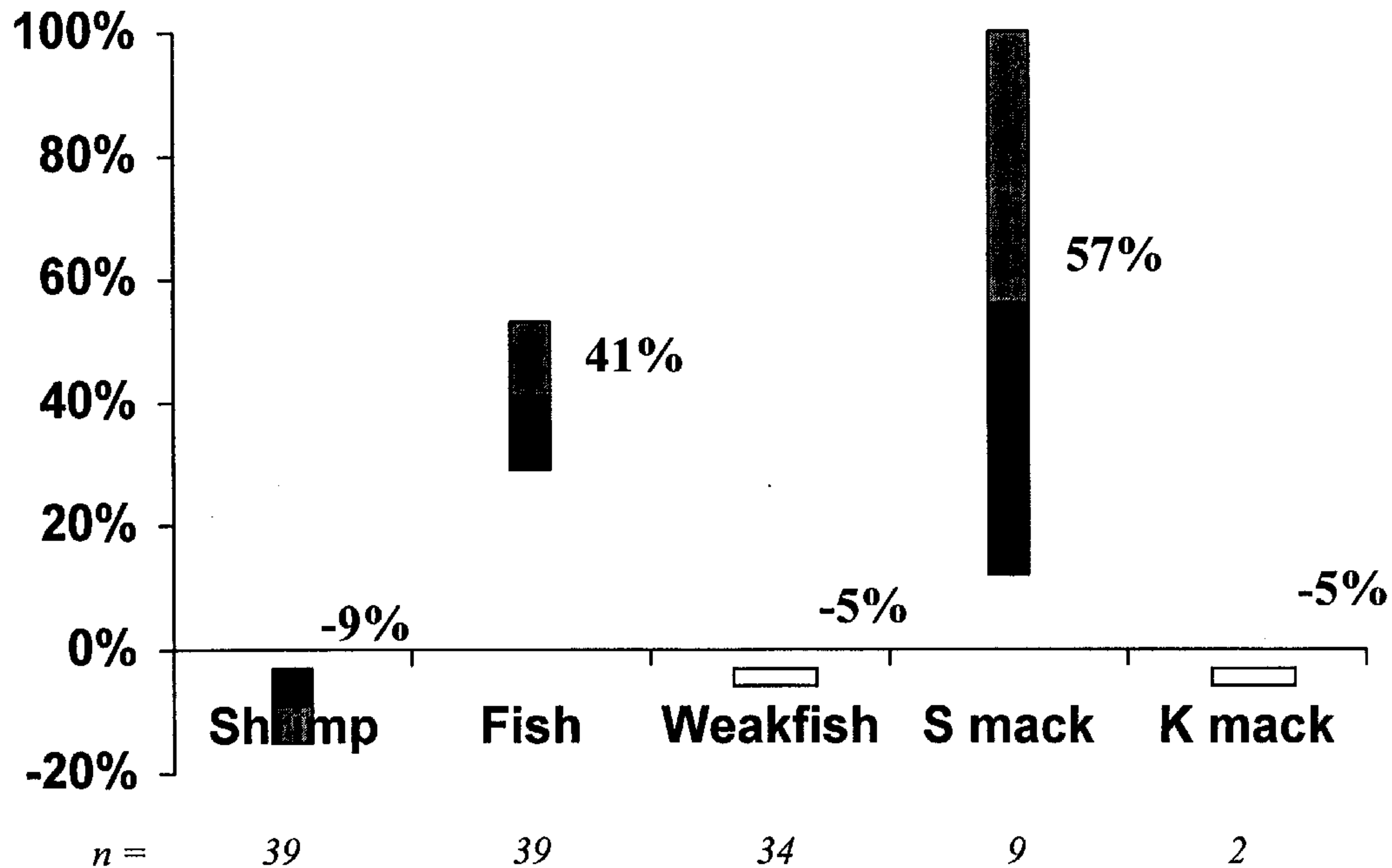


OFFSET FISHEYE (12X5), SS TED

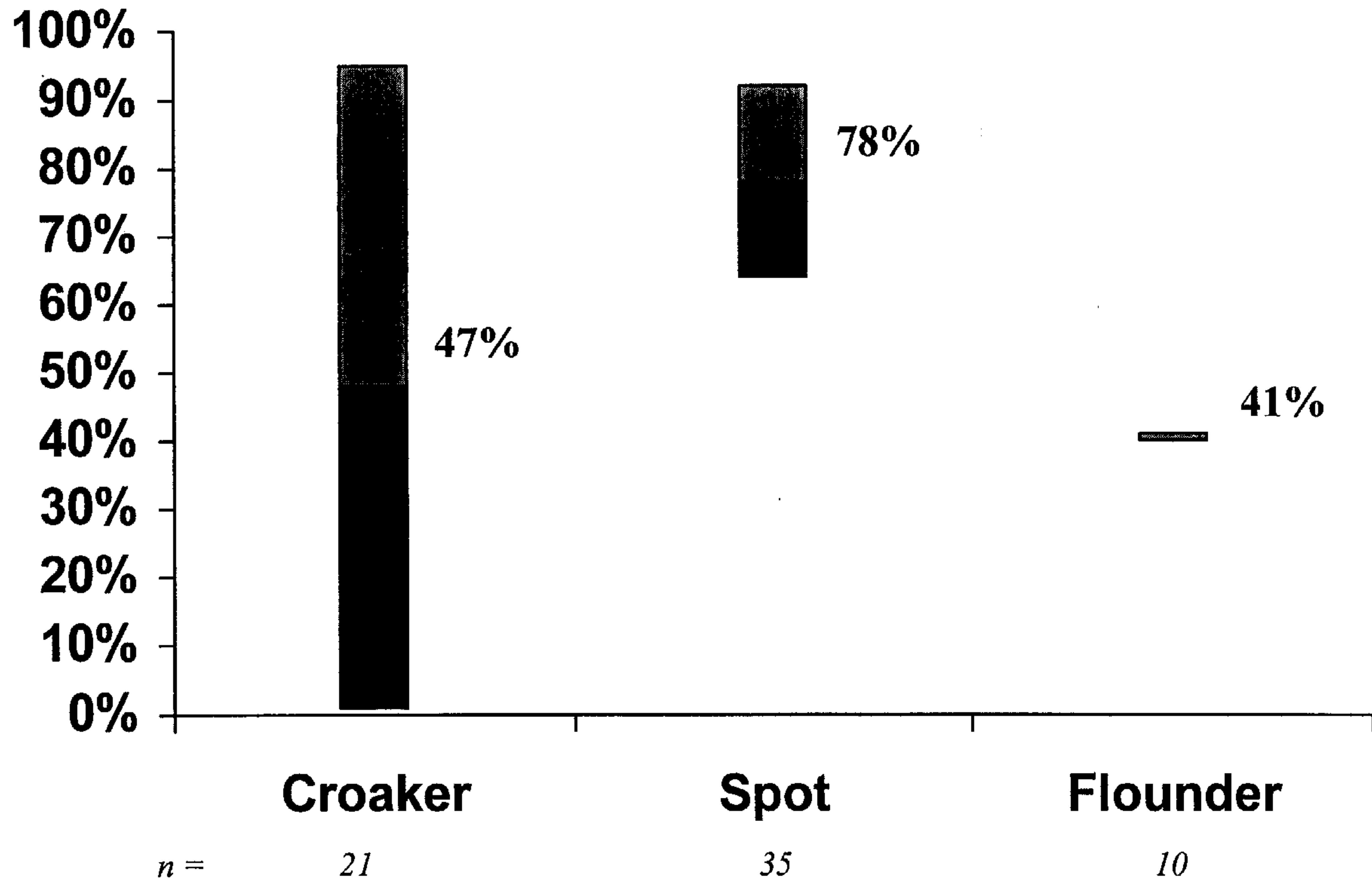
REDUCTION RATES (GOM)



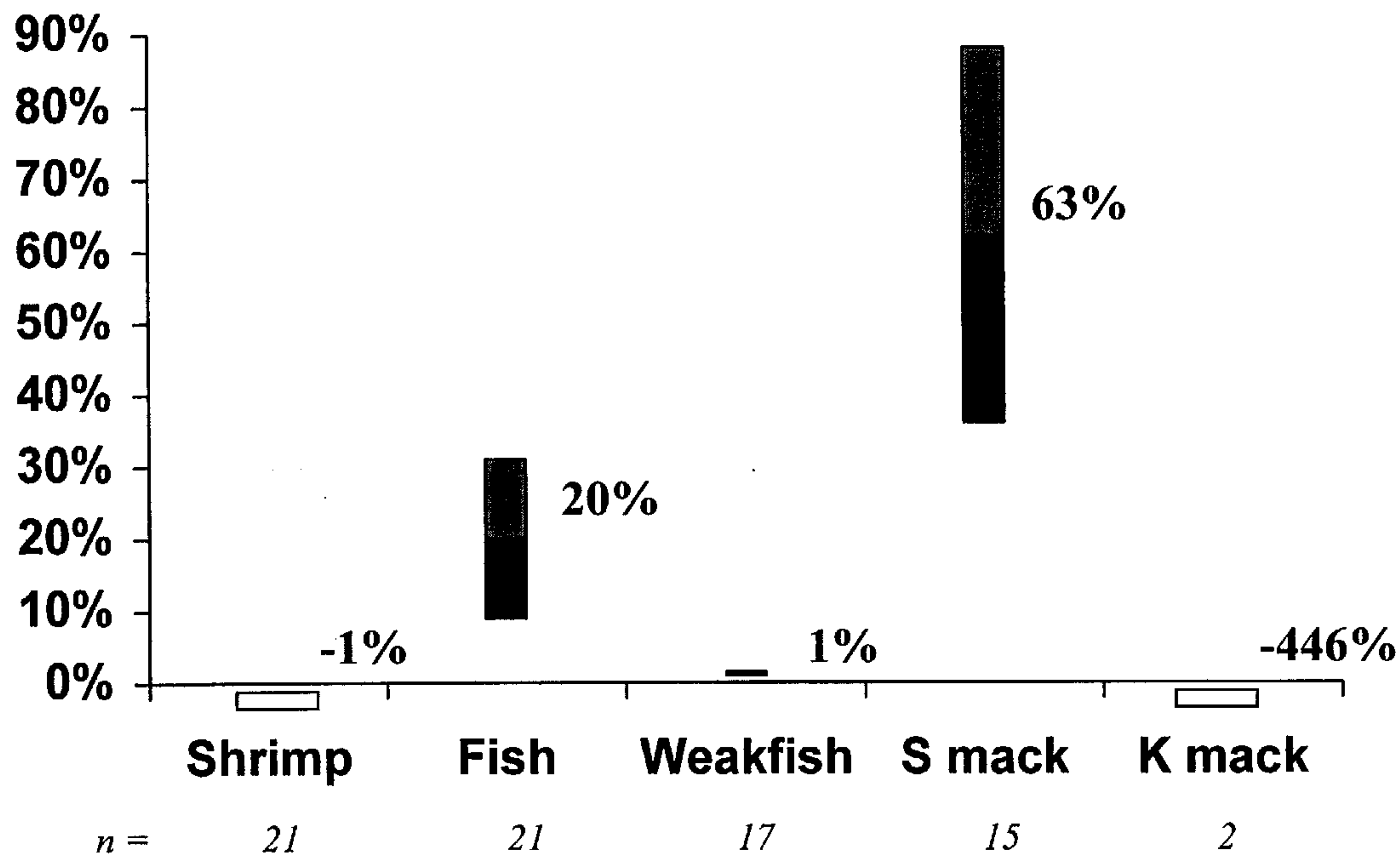
EXTENDED FUNNEL, GA TED REDUCTION RATES (S. ATL)



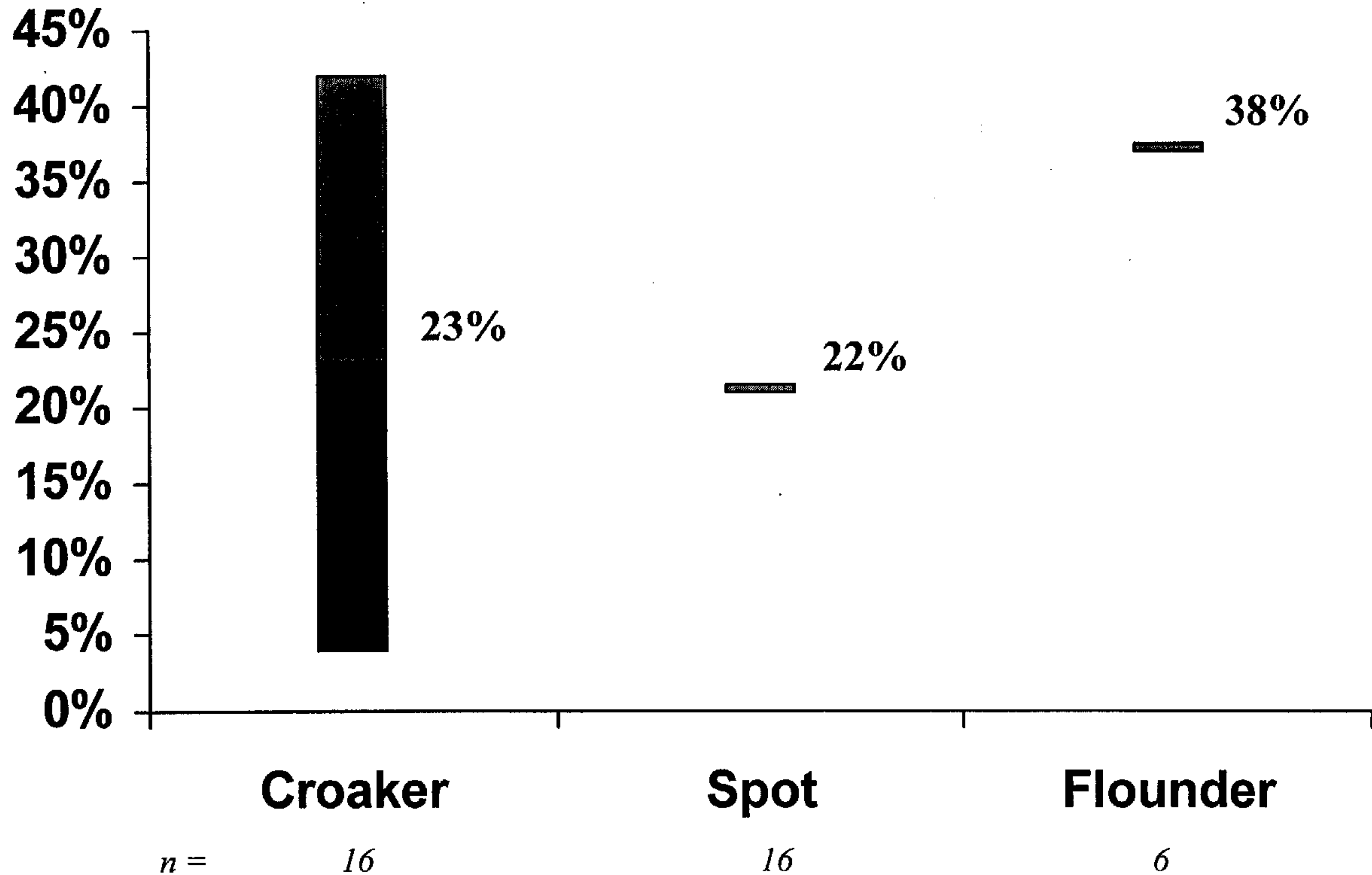
EXTENDED FUNNEL, GA TED REDUCTION RATES (S. ATL)



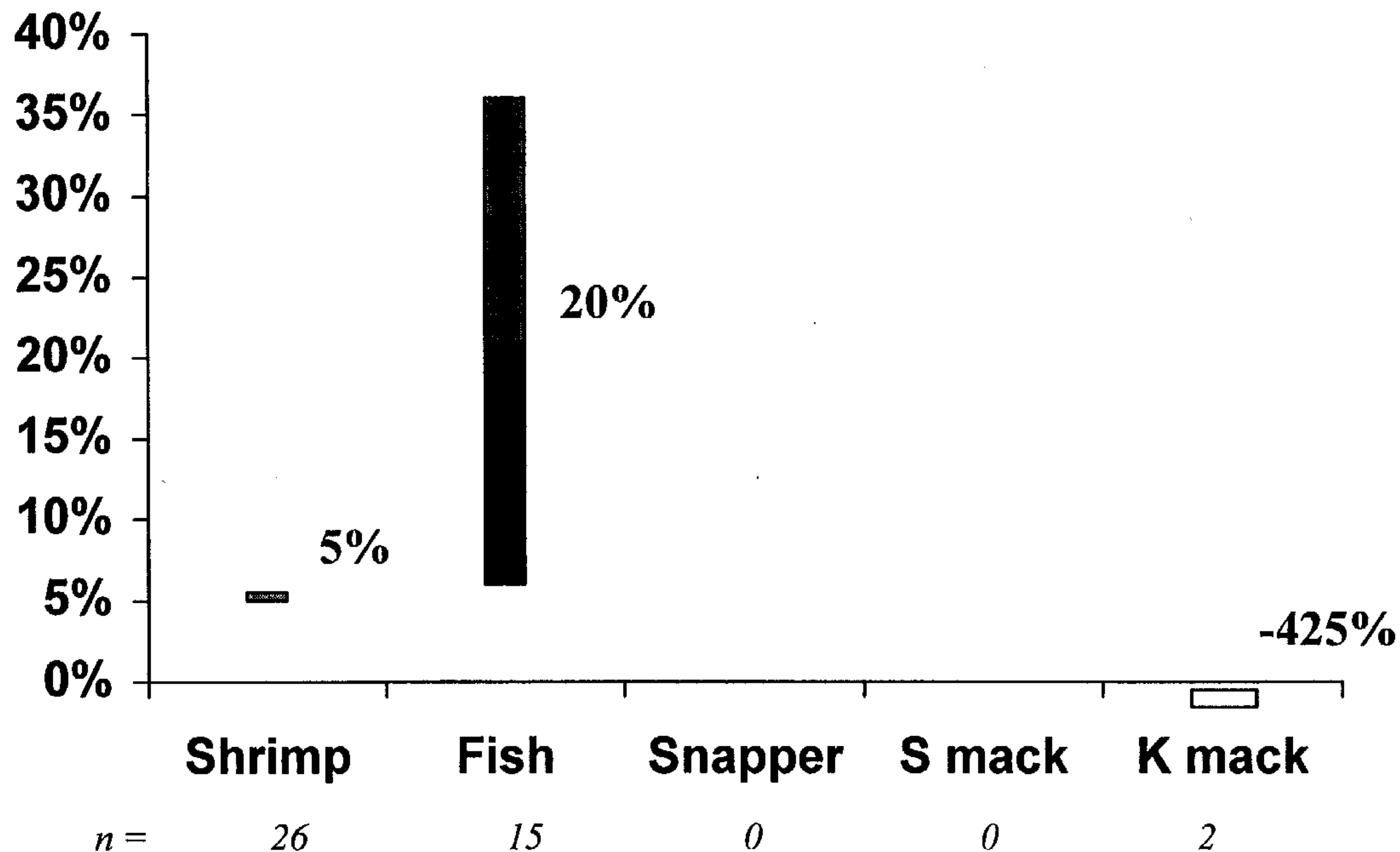
FRONT FISHEYE (4X7), GA TED REDUCTION RATES (S. ATL)



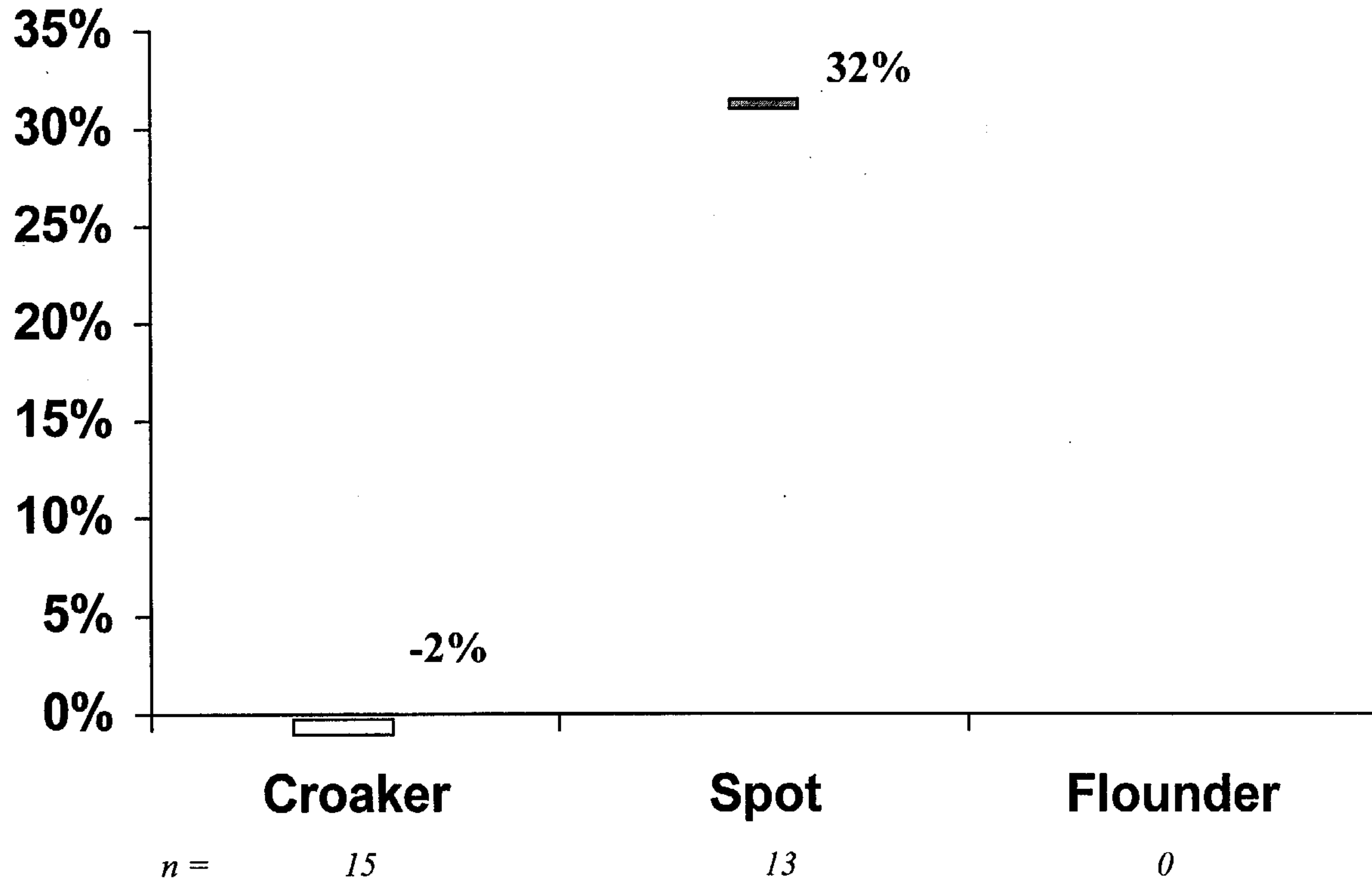
FRONT FISHEYE (4X7), GA TED REDUCTION RATES (S. ATL)



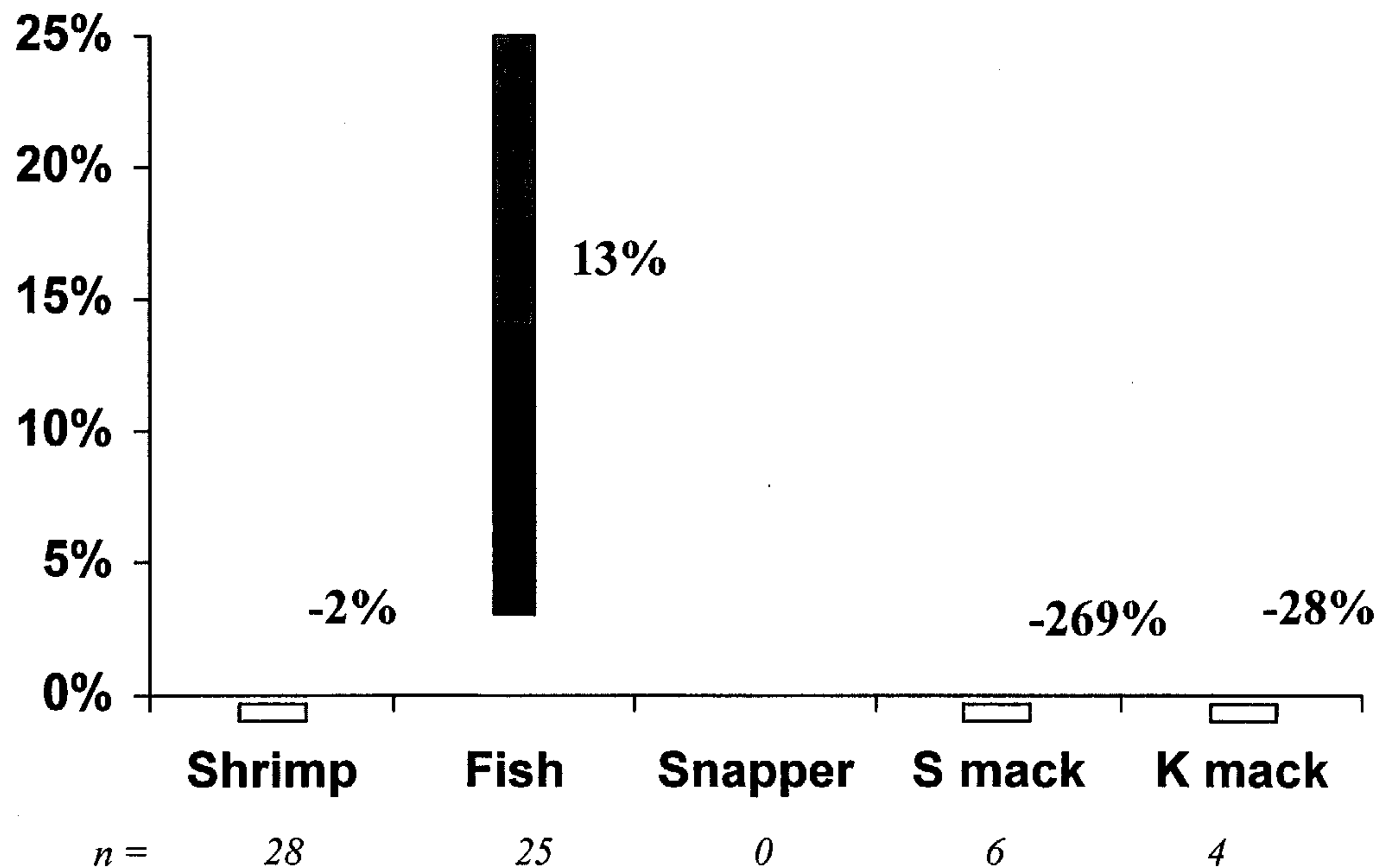
FRONT FISHEYE (12X5), GA TED REDUCTION RATES (GOM)



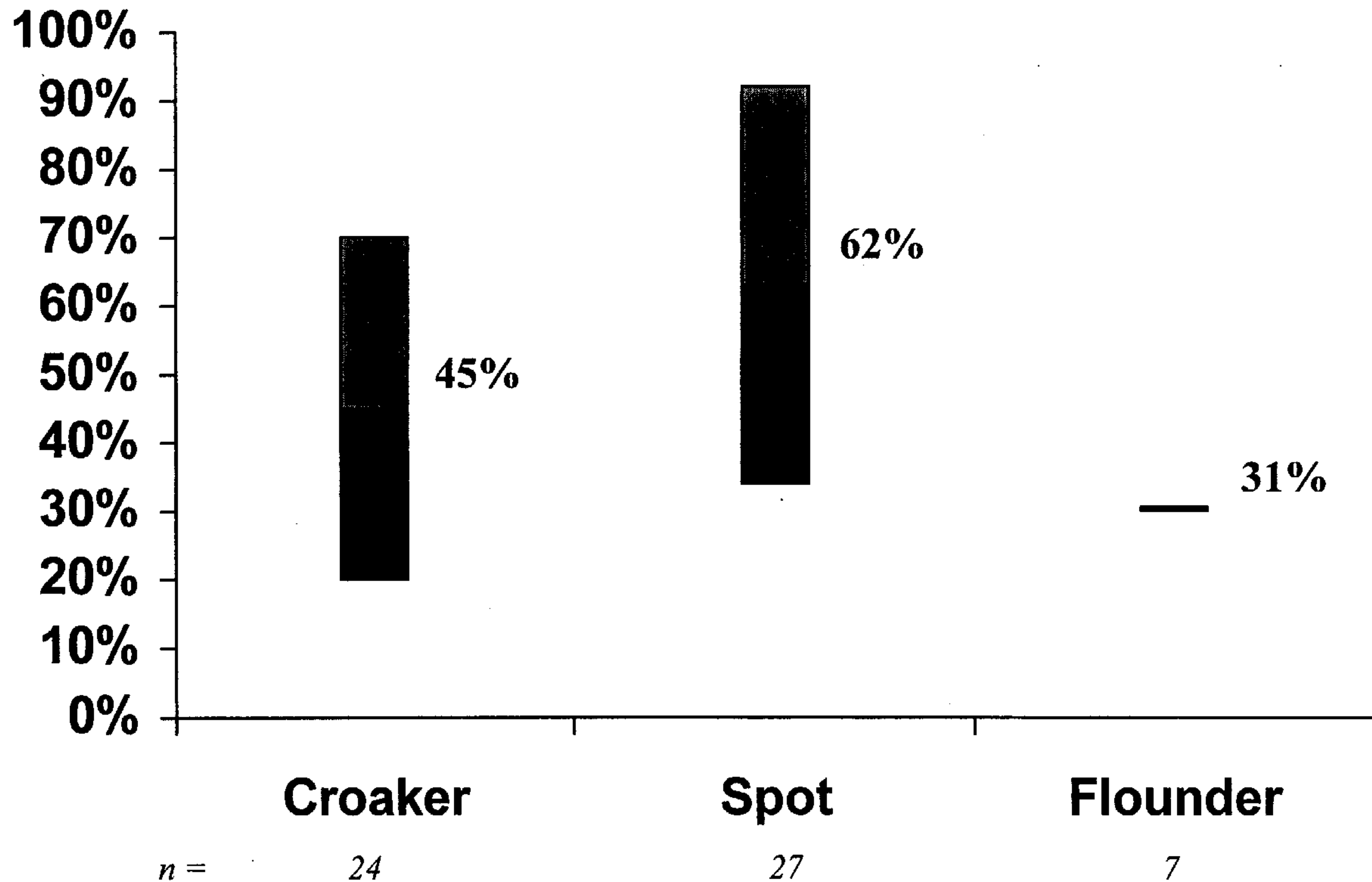
FRONT FISHEYE (12X5), GA TED REDUCTION RATES (GOM)



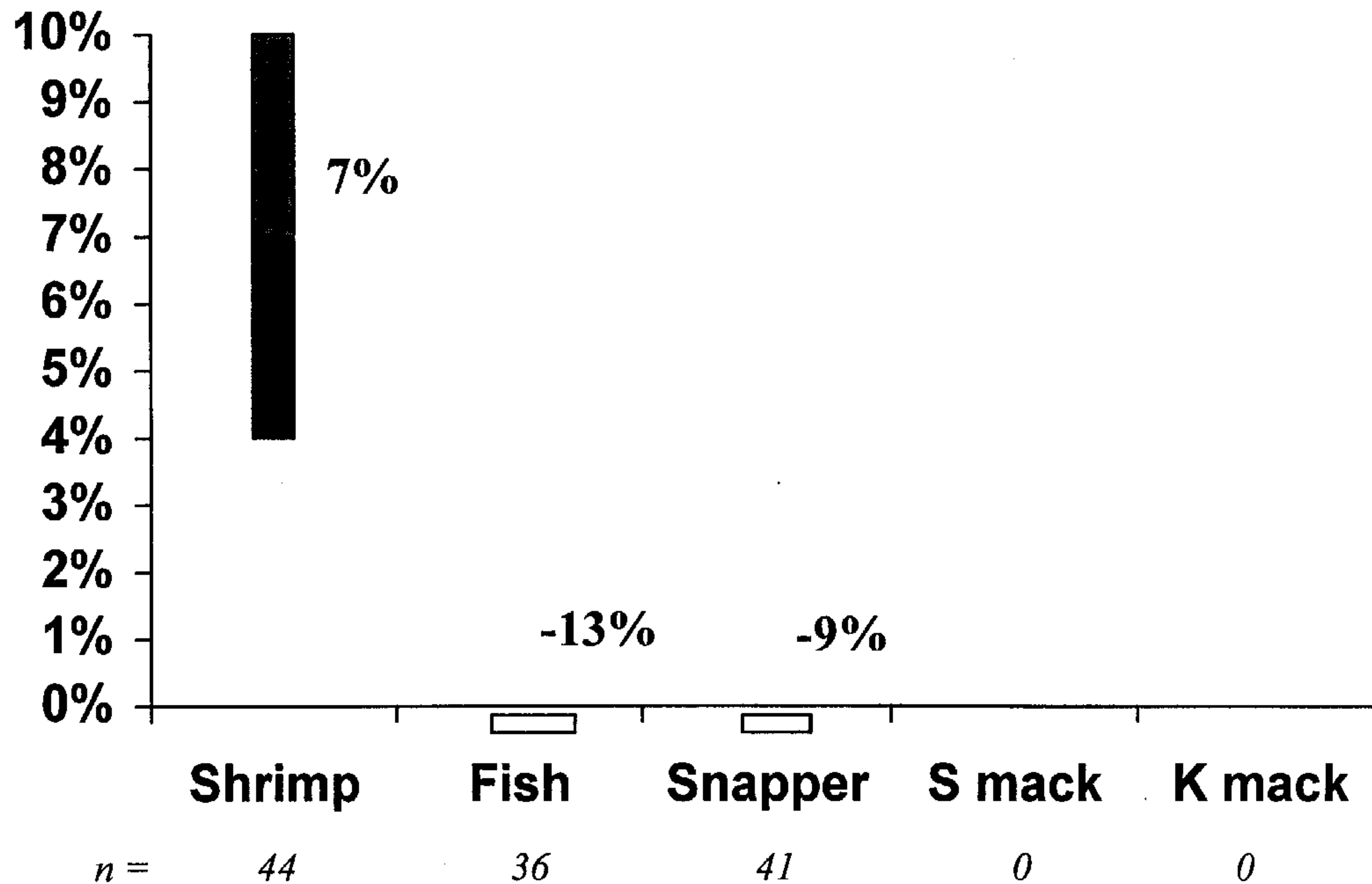
3/5 EXTENDED FUNNEL, AW TED REDUCTION RATES (GOM)



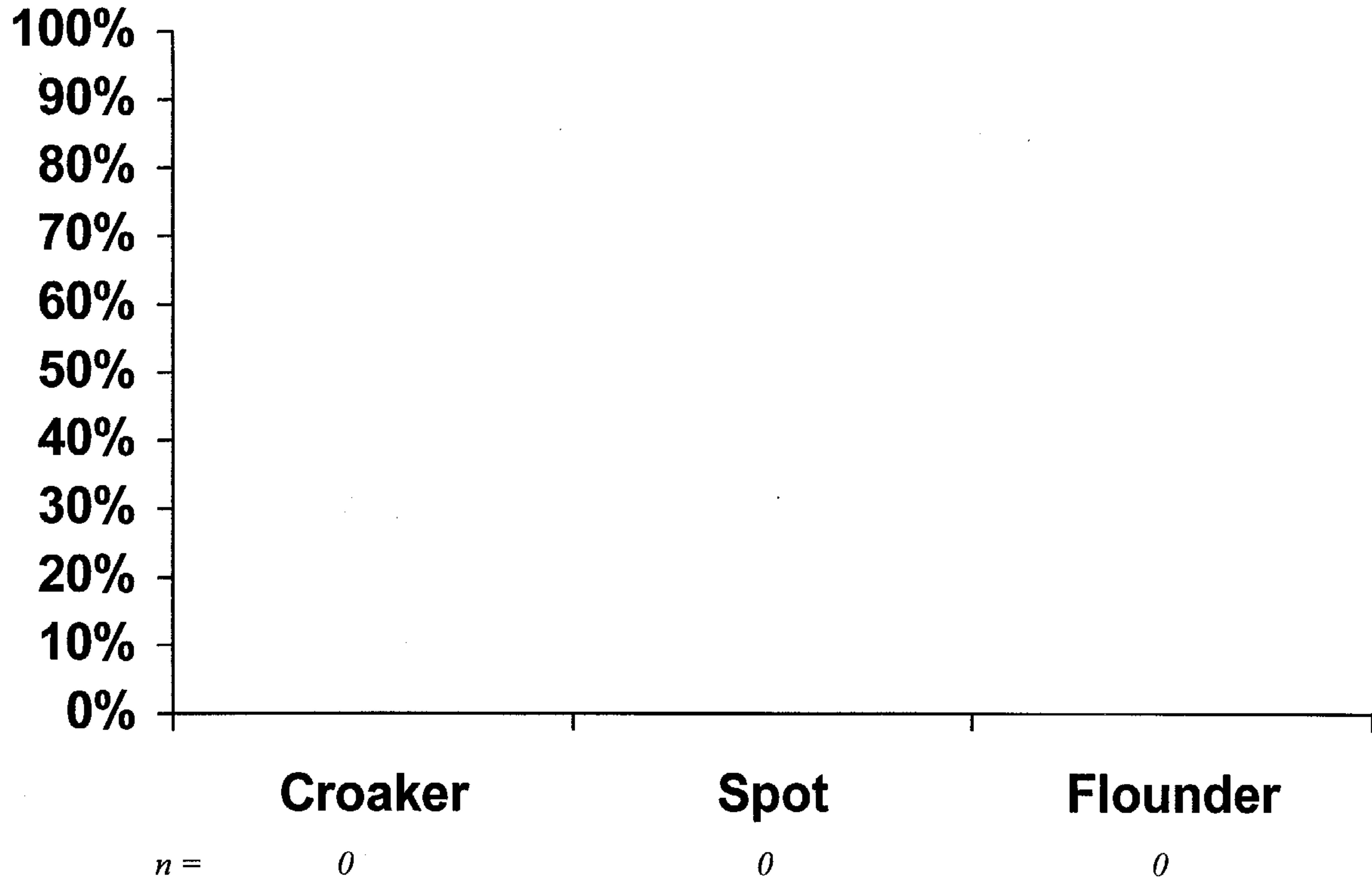
3/5 EXTENDED FUNNEL, AW TED REDUCTION RATES (GOM)



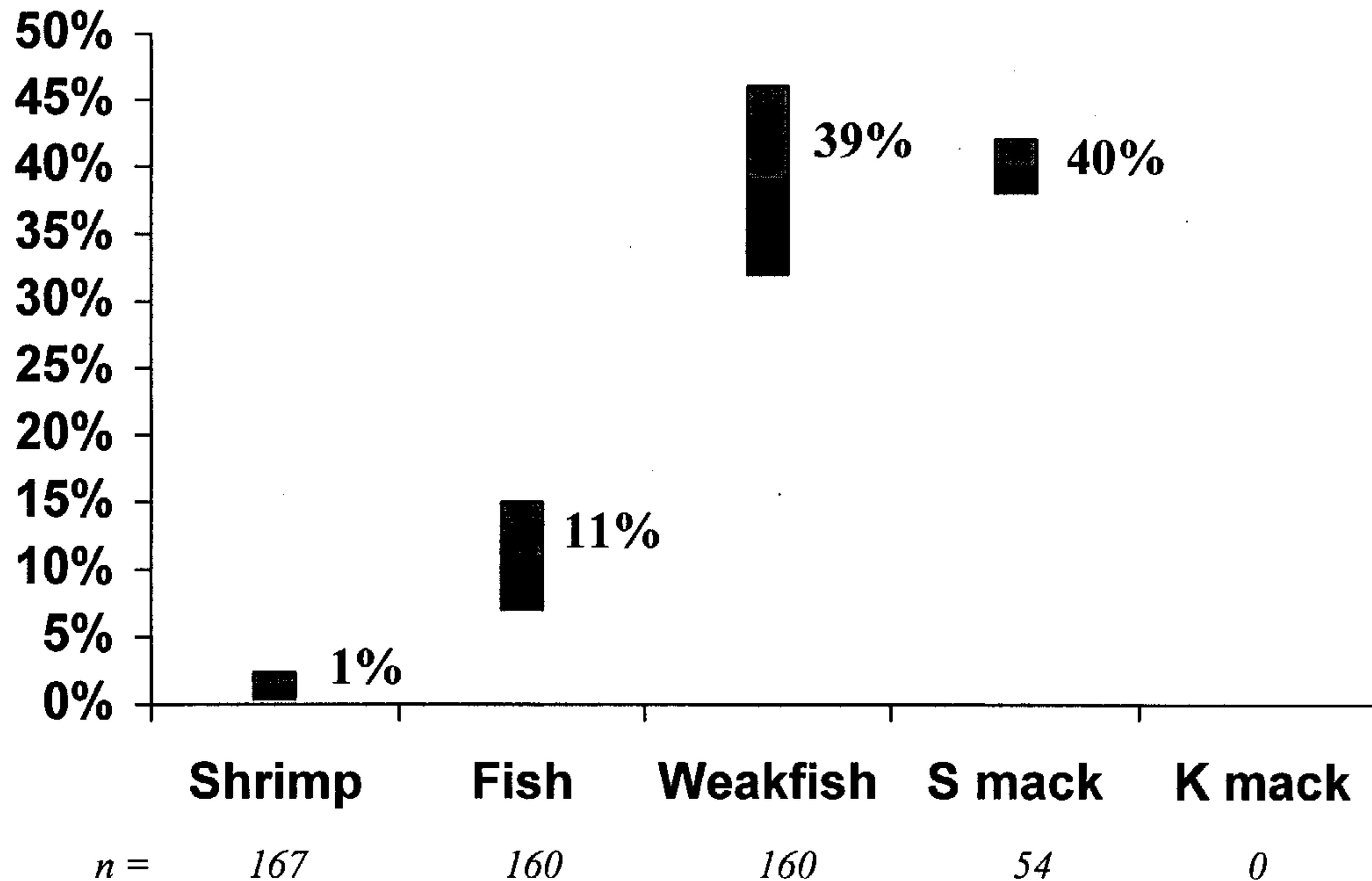
FRONT FISHEYE (4X7), AW TED REDUCTION RATES (GOM)



FRONT FISHEYE (4X7), AW TED REDUCTION RATES (GOM)

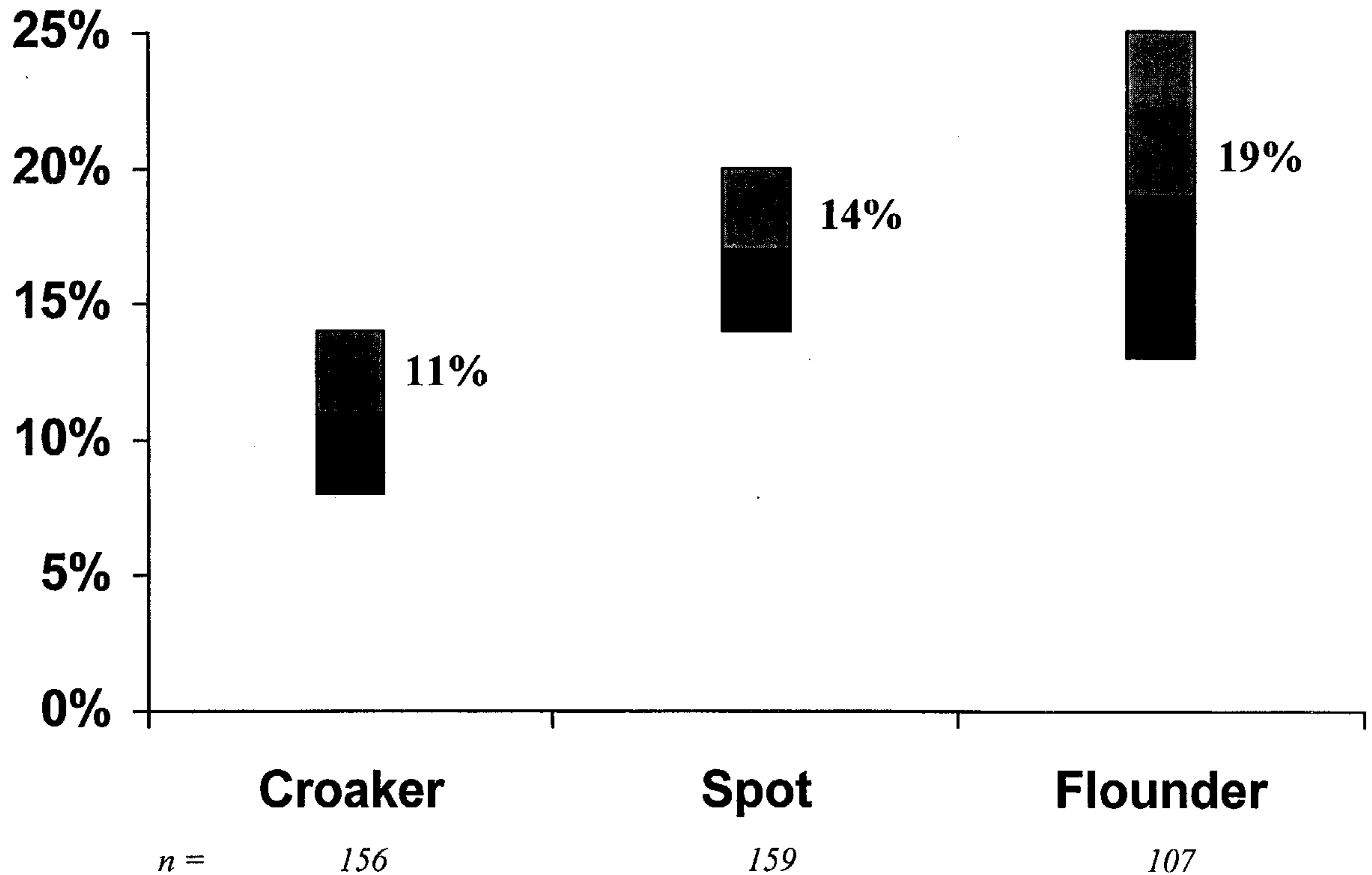


EXTENDED FUNNEL, BB TED REDUCTION RATES (S. ATL)

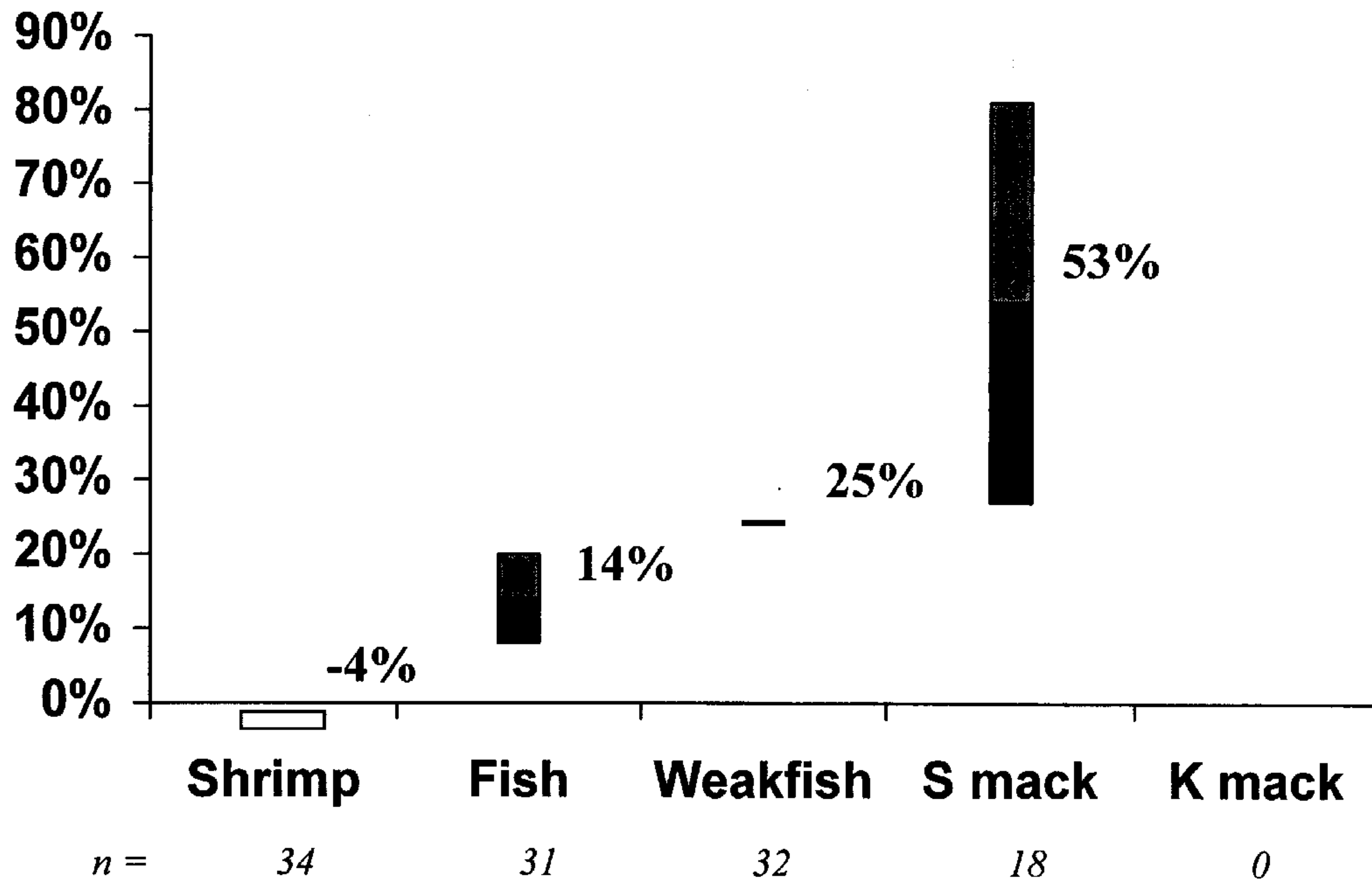


EXTENDED FUNNEL, BB TED

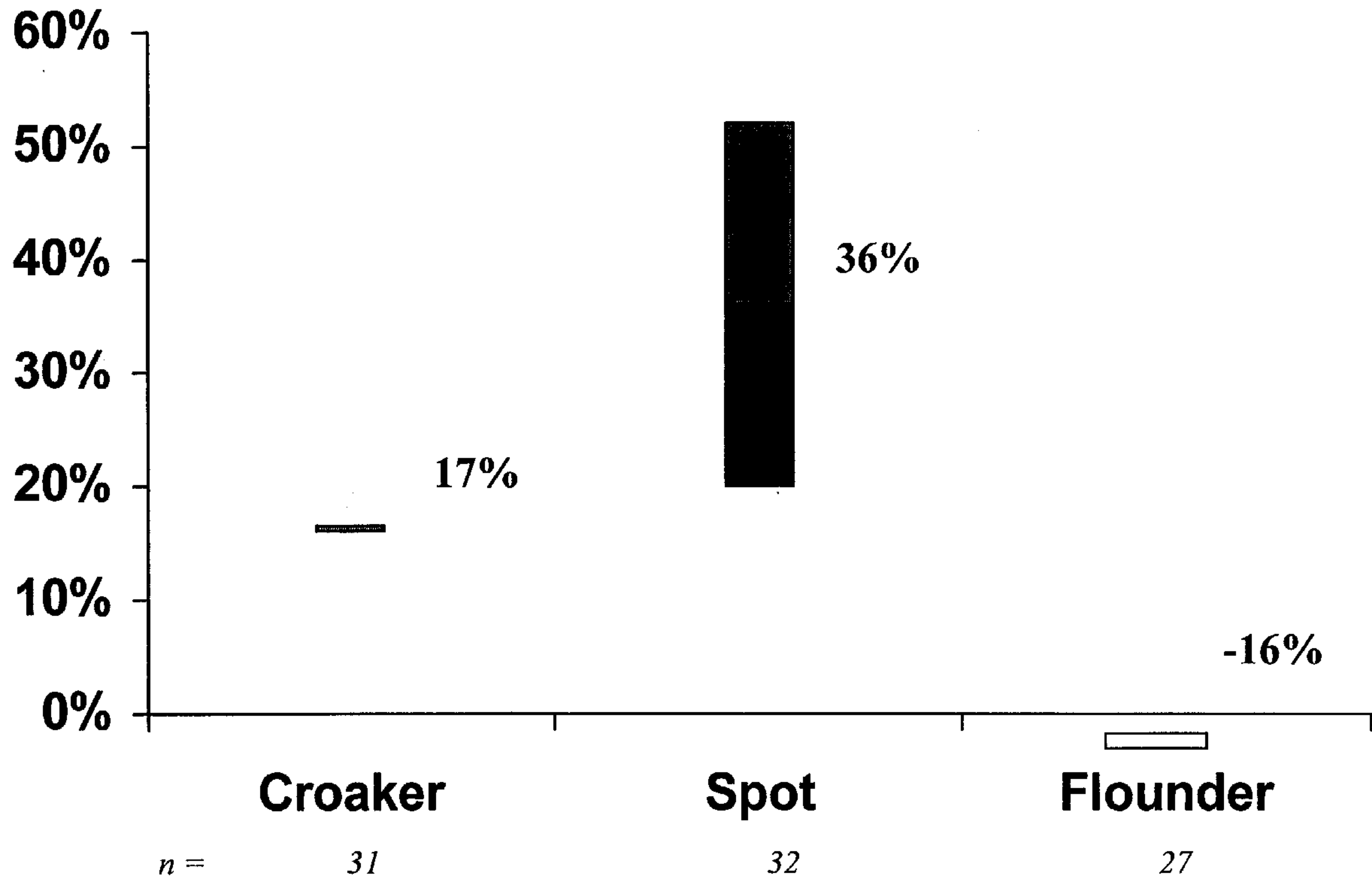
REDUCTION RATES (S. ATL)



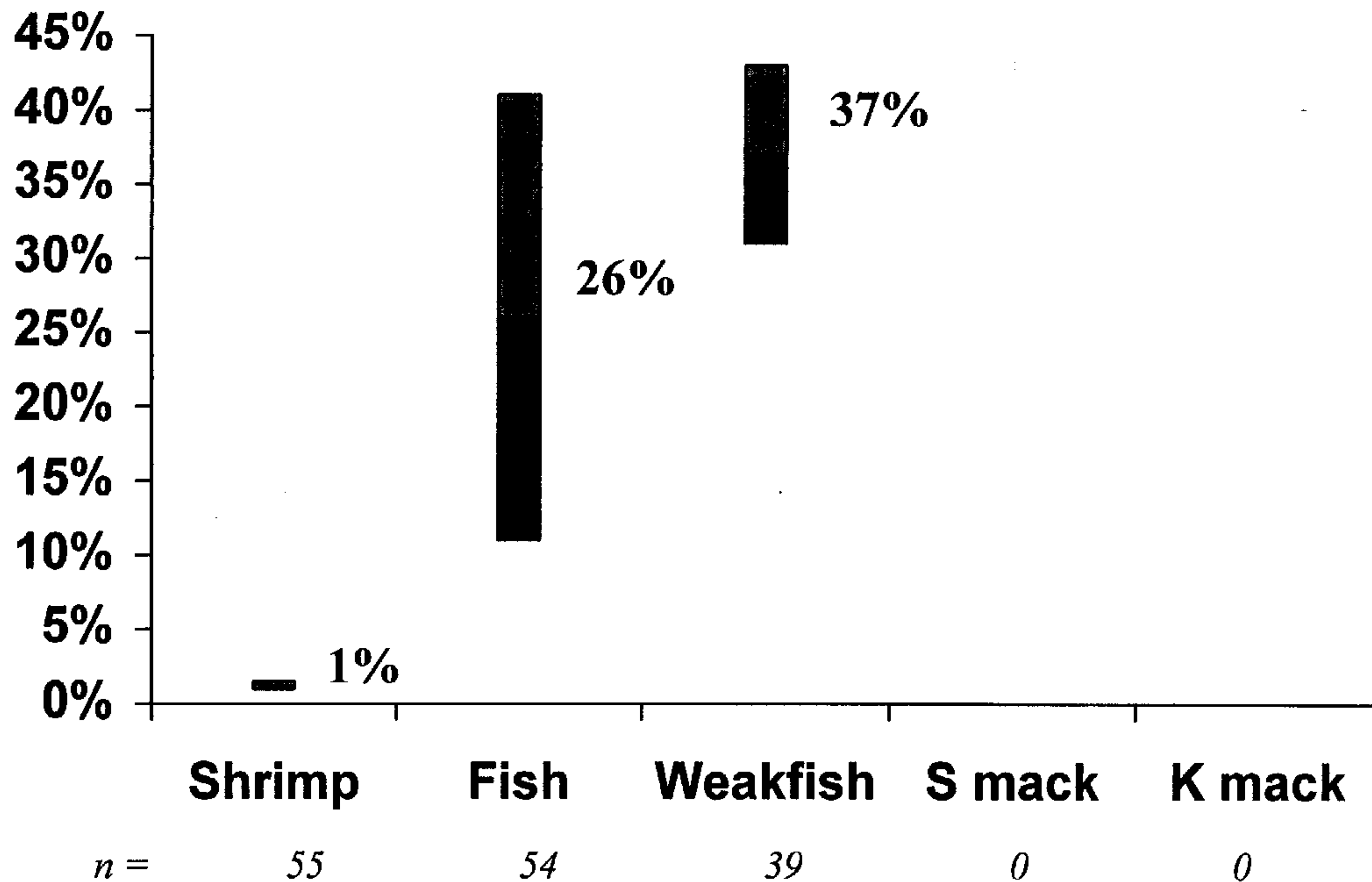
FRONT FISHEYE (12X5), BB TED REDUCTION RATES (S. ATL)



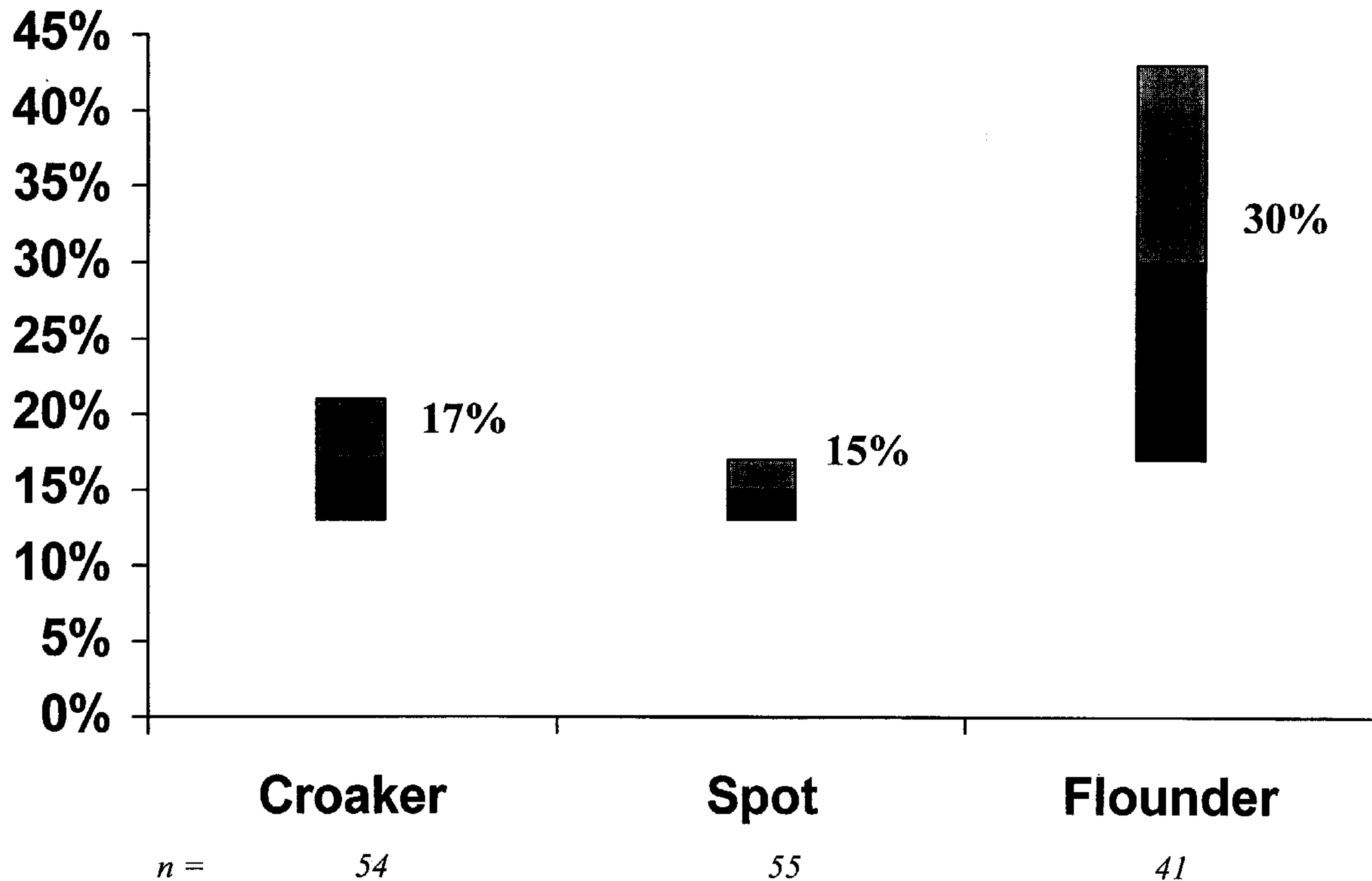
FRONT FISHEYE (12X5), BB TED REDUCTION RATES (S. ATL)



OFFSET FISHEYE (12X5), BB TED REDUCTION RATES (S. ATL)

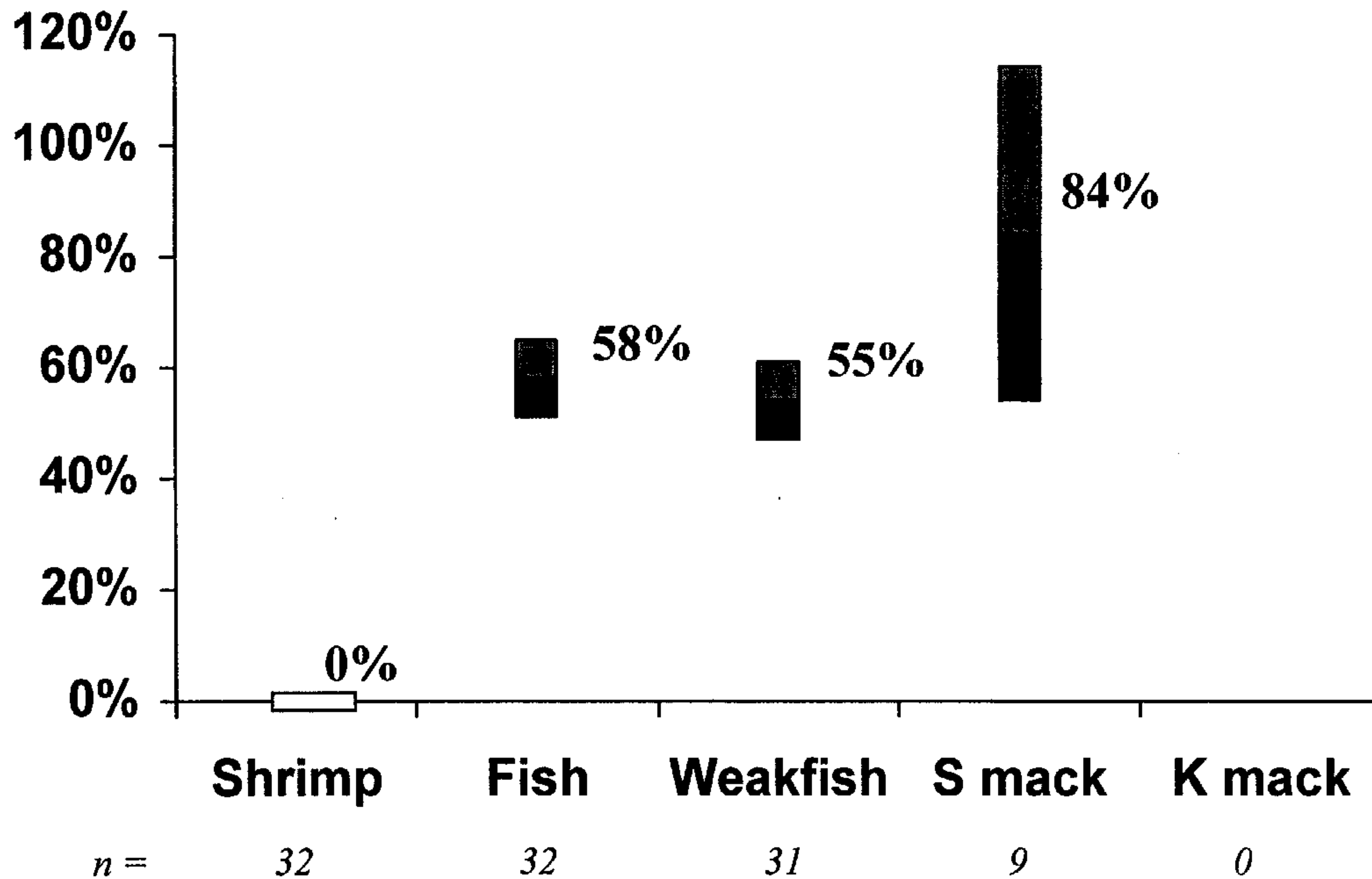


OFFSET FISHEYE (12X5), BB TED REDUCTION RATES (S. ATL)



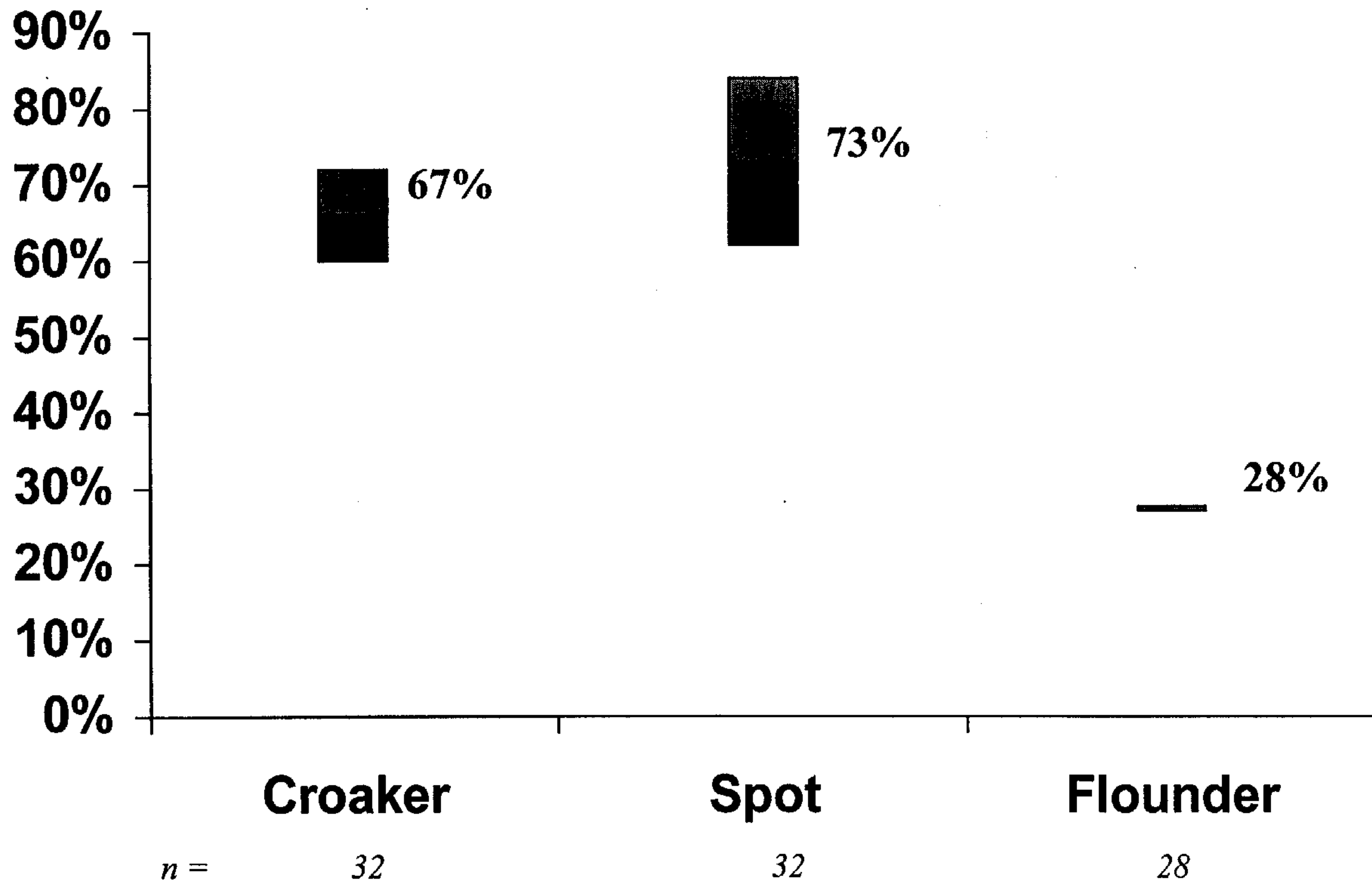
EXTENDED FUNNEL, SS TED

REDUCTION RATES (S. ATL)

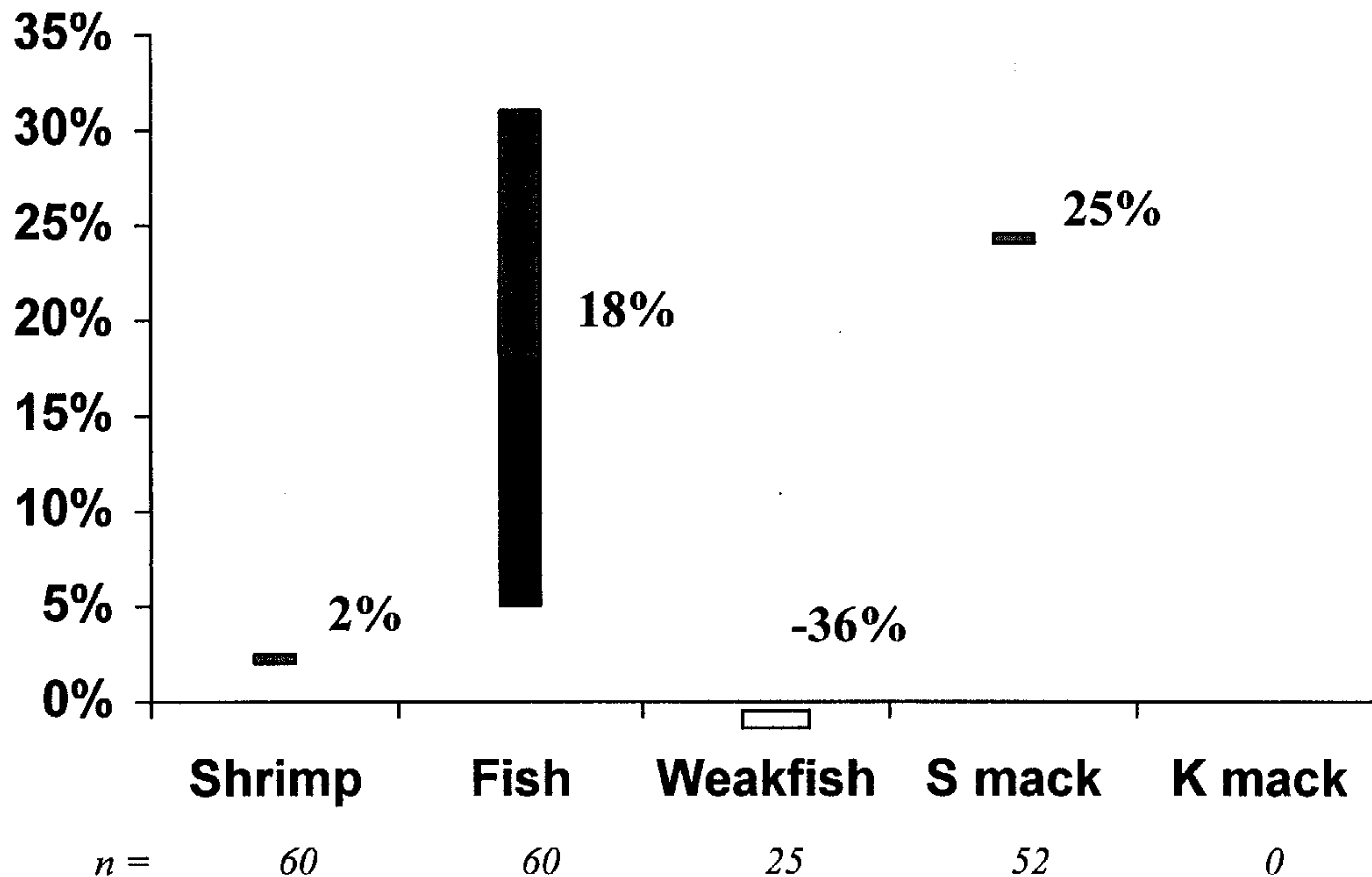


EXTENDED FUNNEL, SS TED

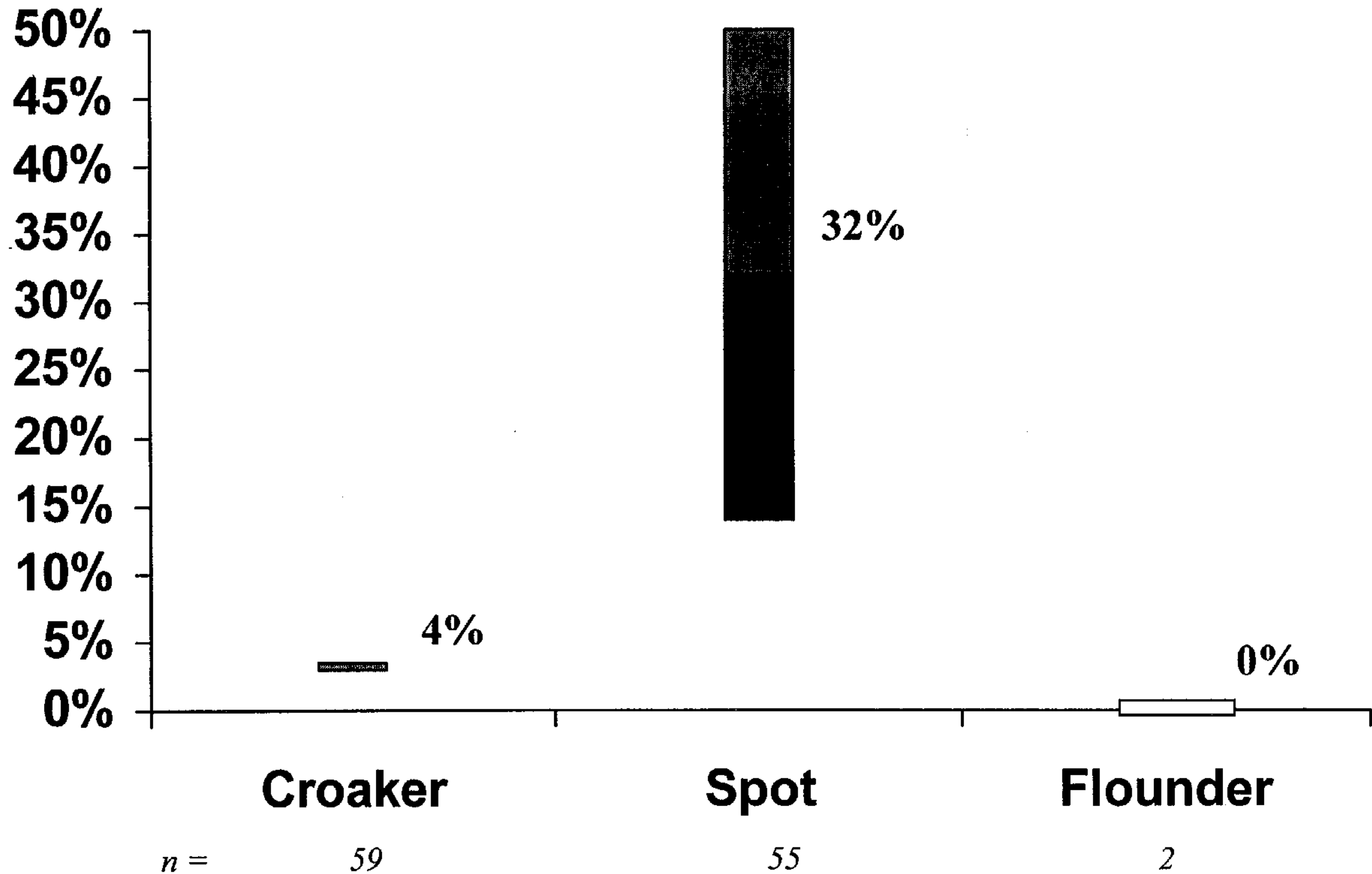
REDUCTION RATES (S. ATL)



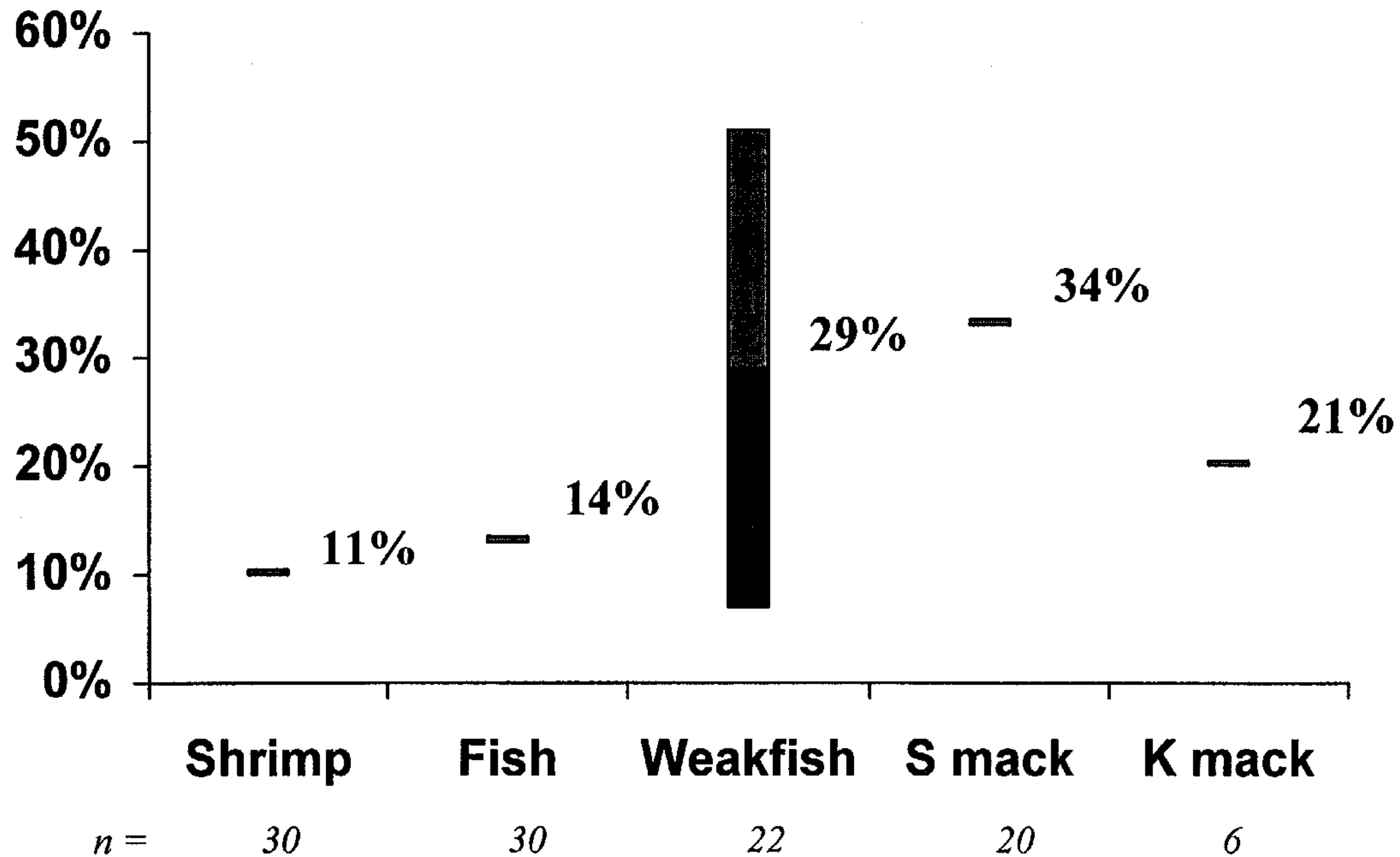
FRONT FISHEYE (4X7), NO TED REDUCTION RATES (S. ATL)



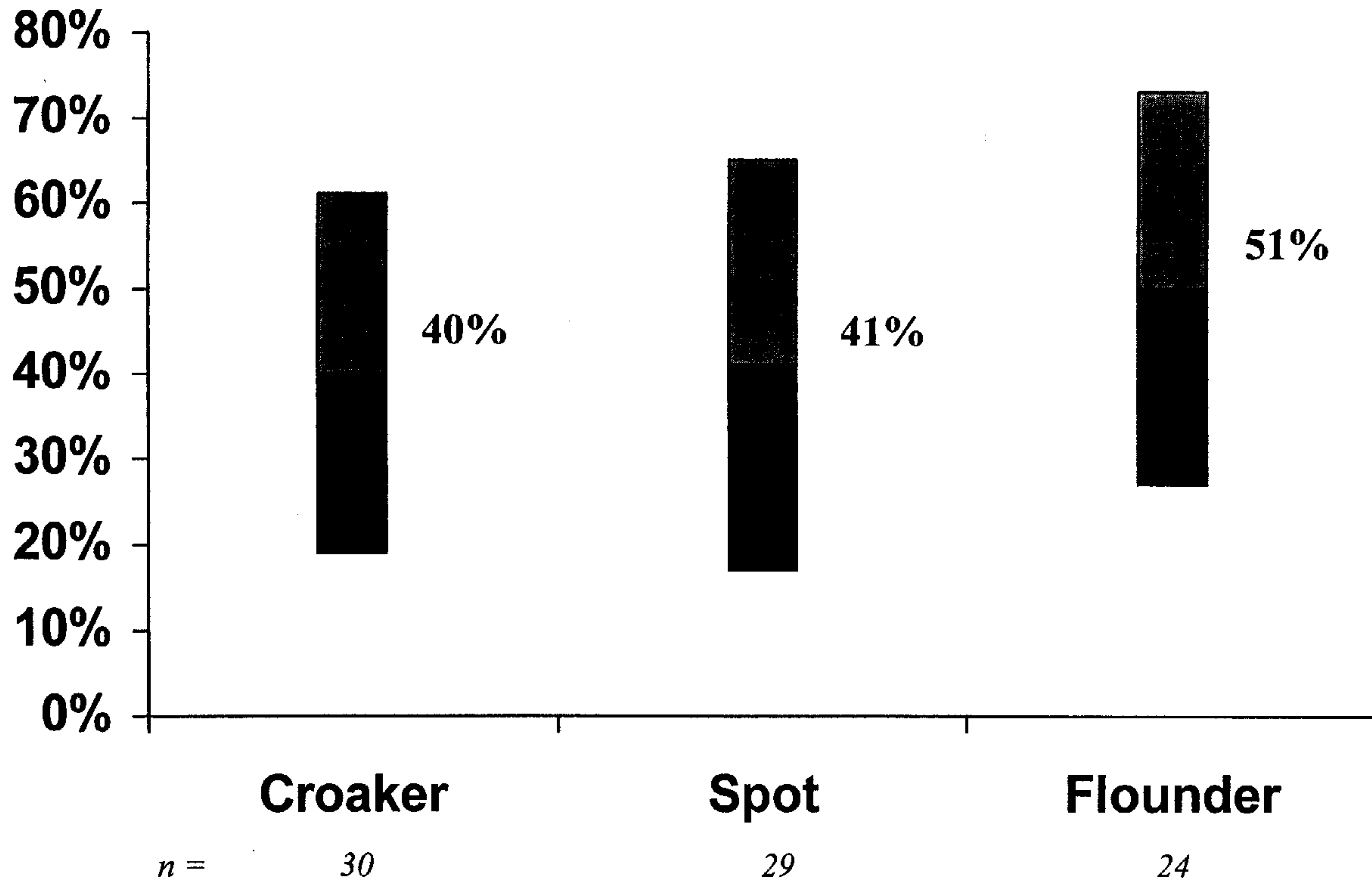
FRONT FISHEYE (4X7), NO TED REDUCTION RATES (S. ATL)



MIDDLE FISHEYE (6X6), NO TED REDUCTION RATES (S. ATL)

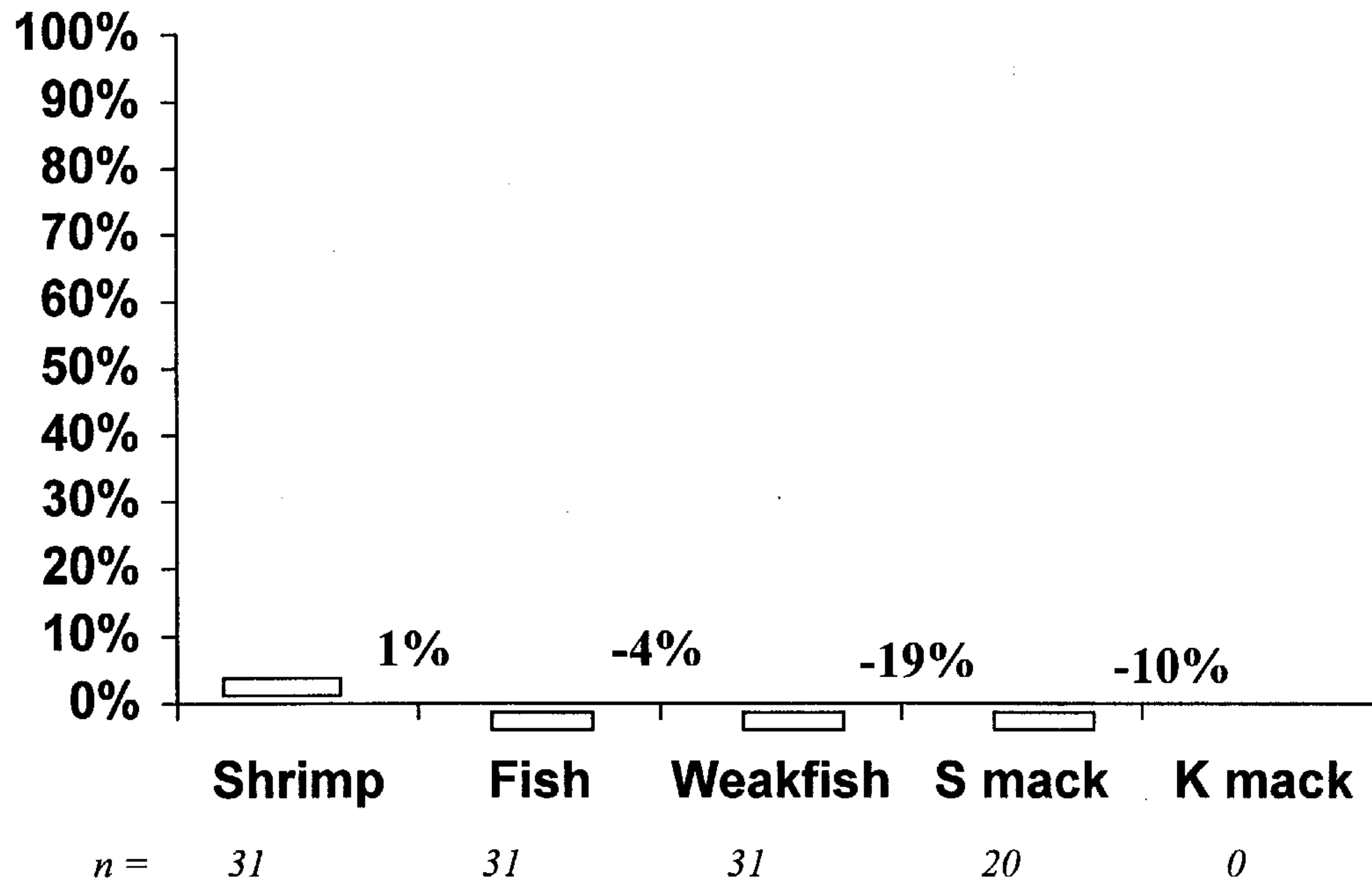


MIDDLE FISHEYE (6X6), NO TED REDUCTION RATES (S. ATL)



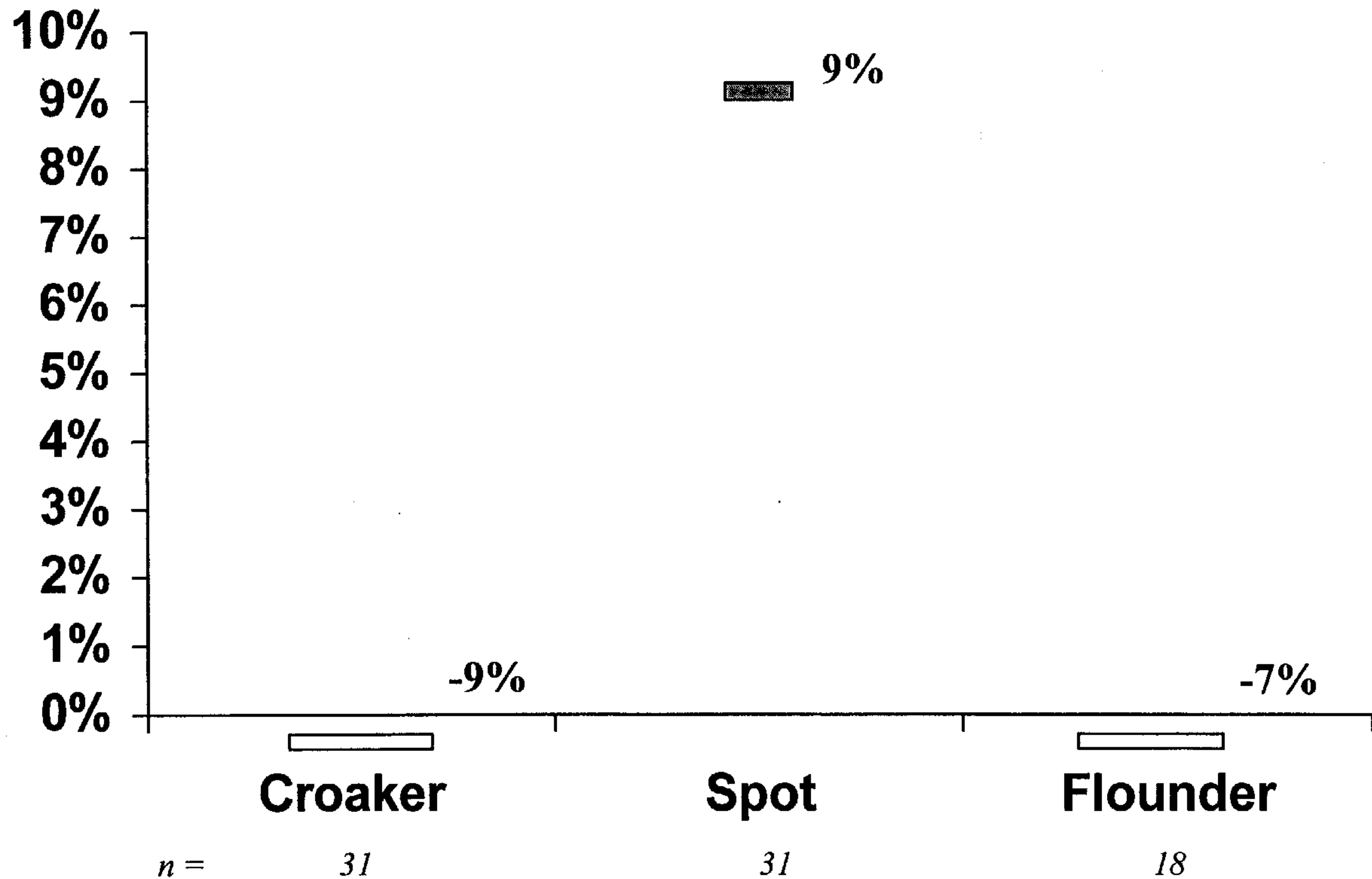
SNAKE EYES, PARTED

REDUCTION RATES (S. ATL)

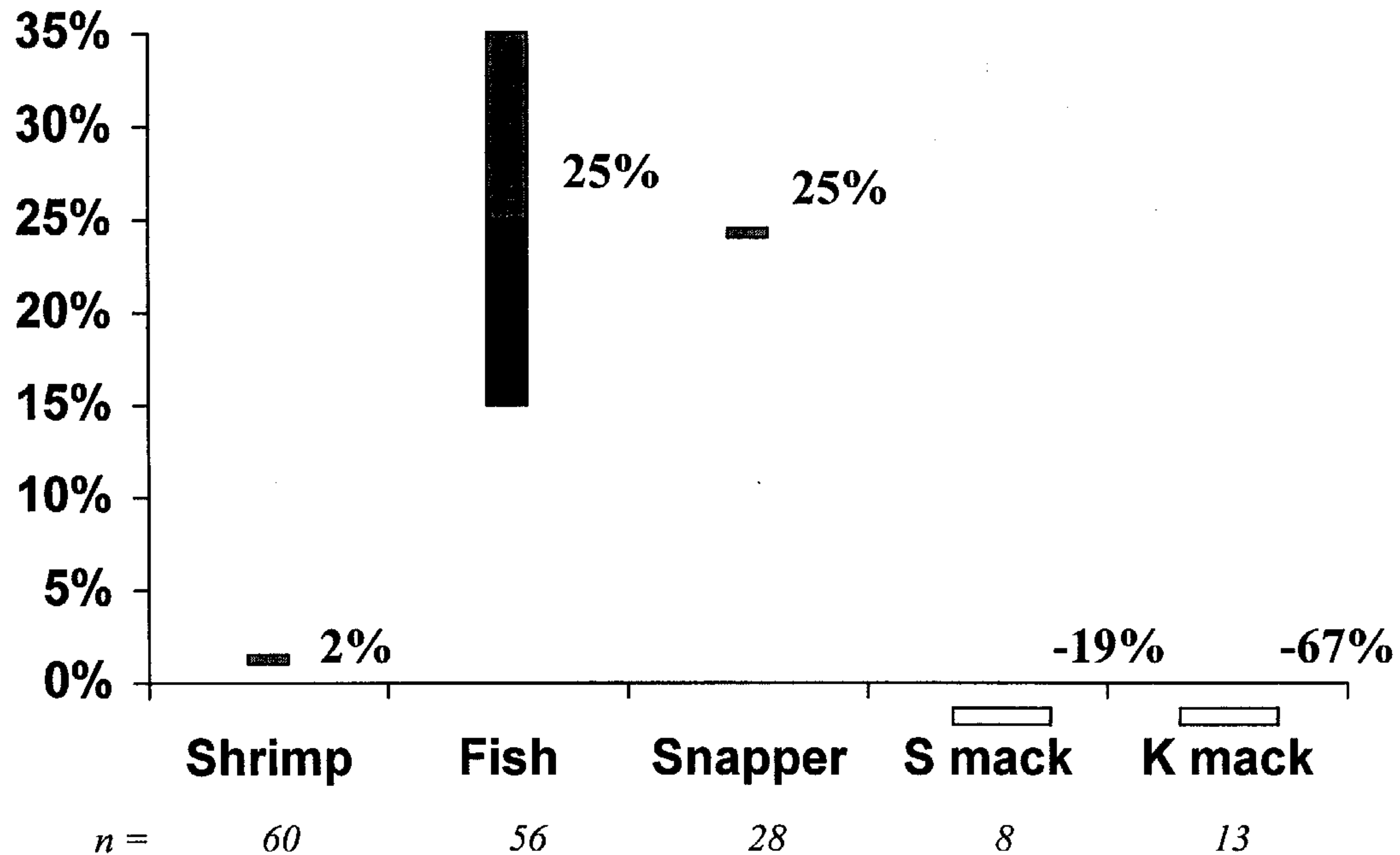


SNAKE EYES, PARTED

REDUCTION RATES (GOM)

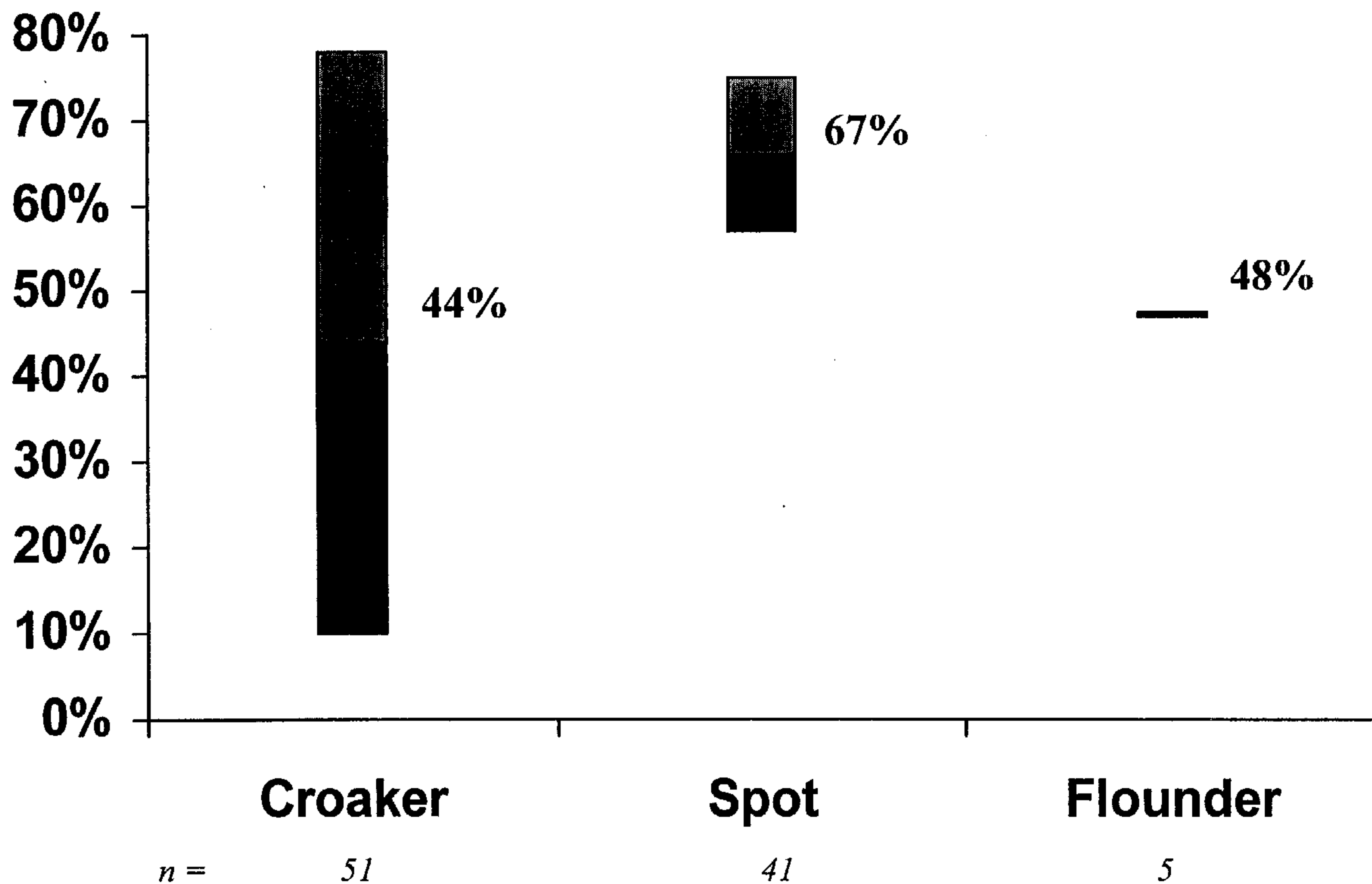


3/5 EXTENDED FUNNEL, BUS TED REDUCTION RATES (GOM)

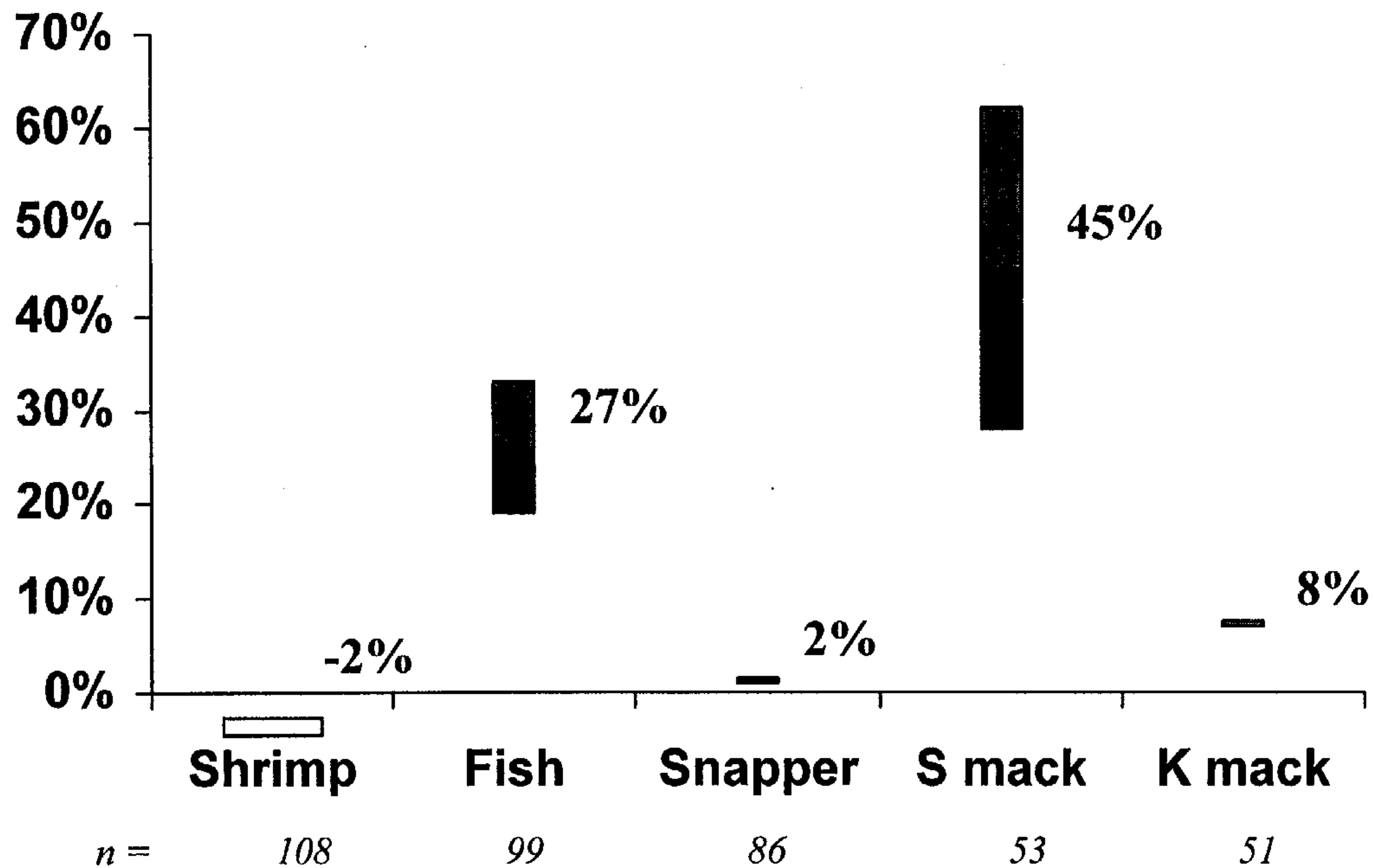


3/5 EXTENDED FUNNEL, BUS TED

REDUCTION RATES (GOM)

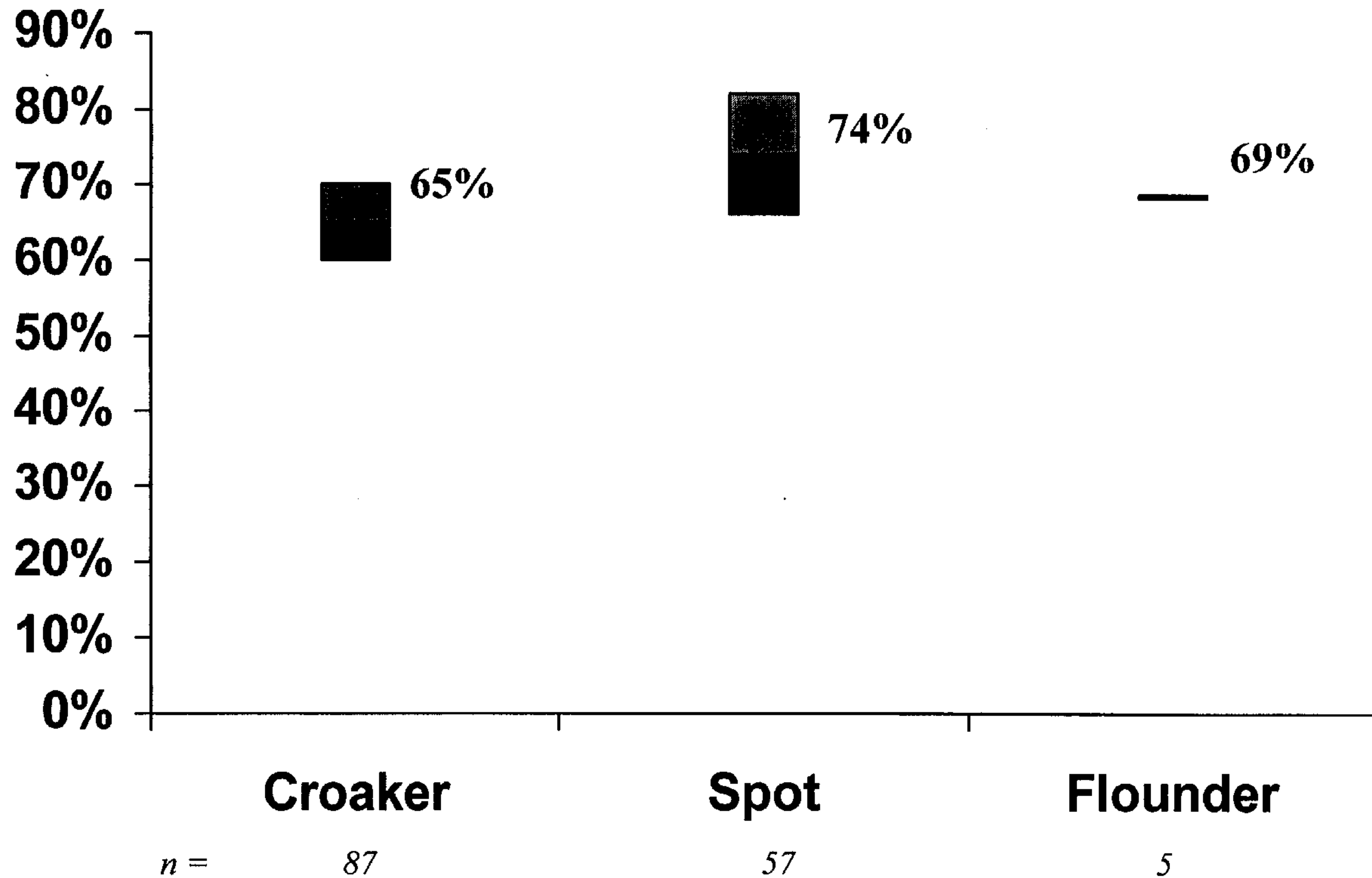


EXTENDED FUNNEL, SS TED REDUCTION RATES (GOM)

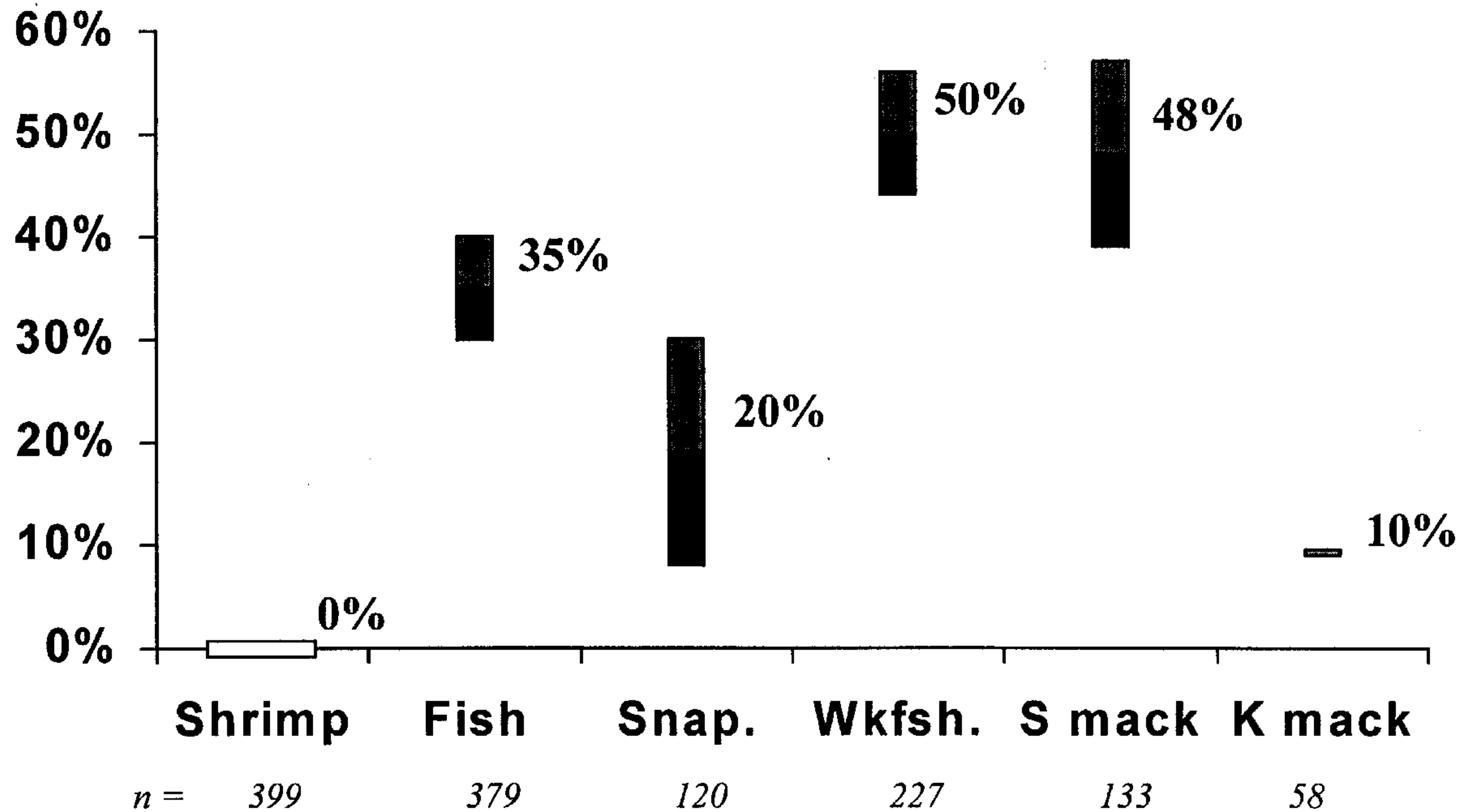


EXTENDED FUNNEL, SS TED

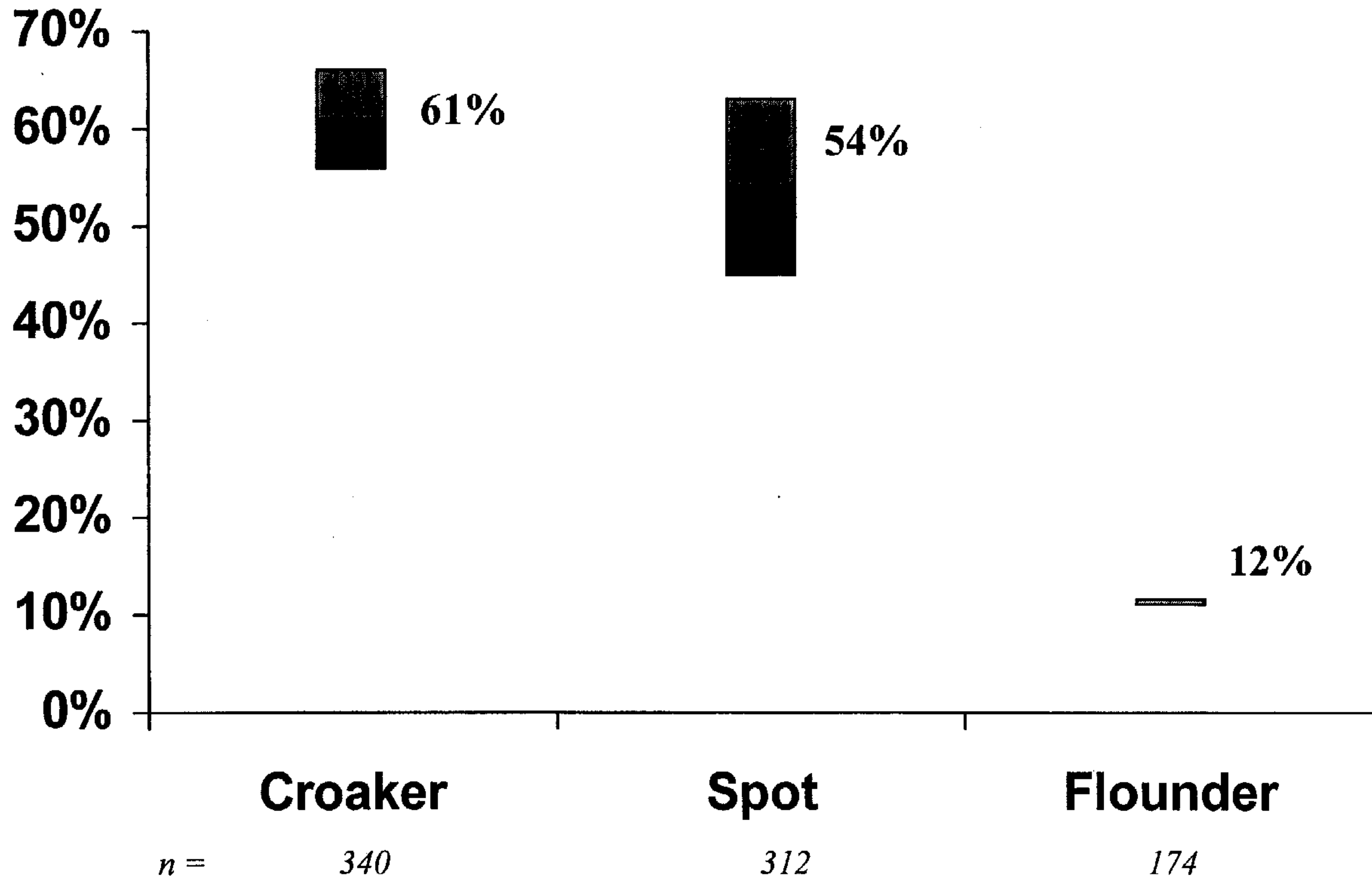
REDUCTION RATES (GOM)



COMBINED EXTENDED FUNNEL REDUCTION RATES



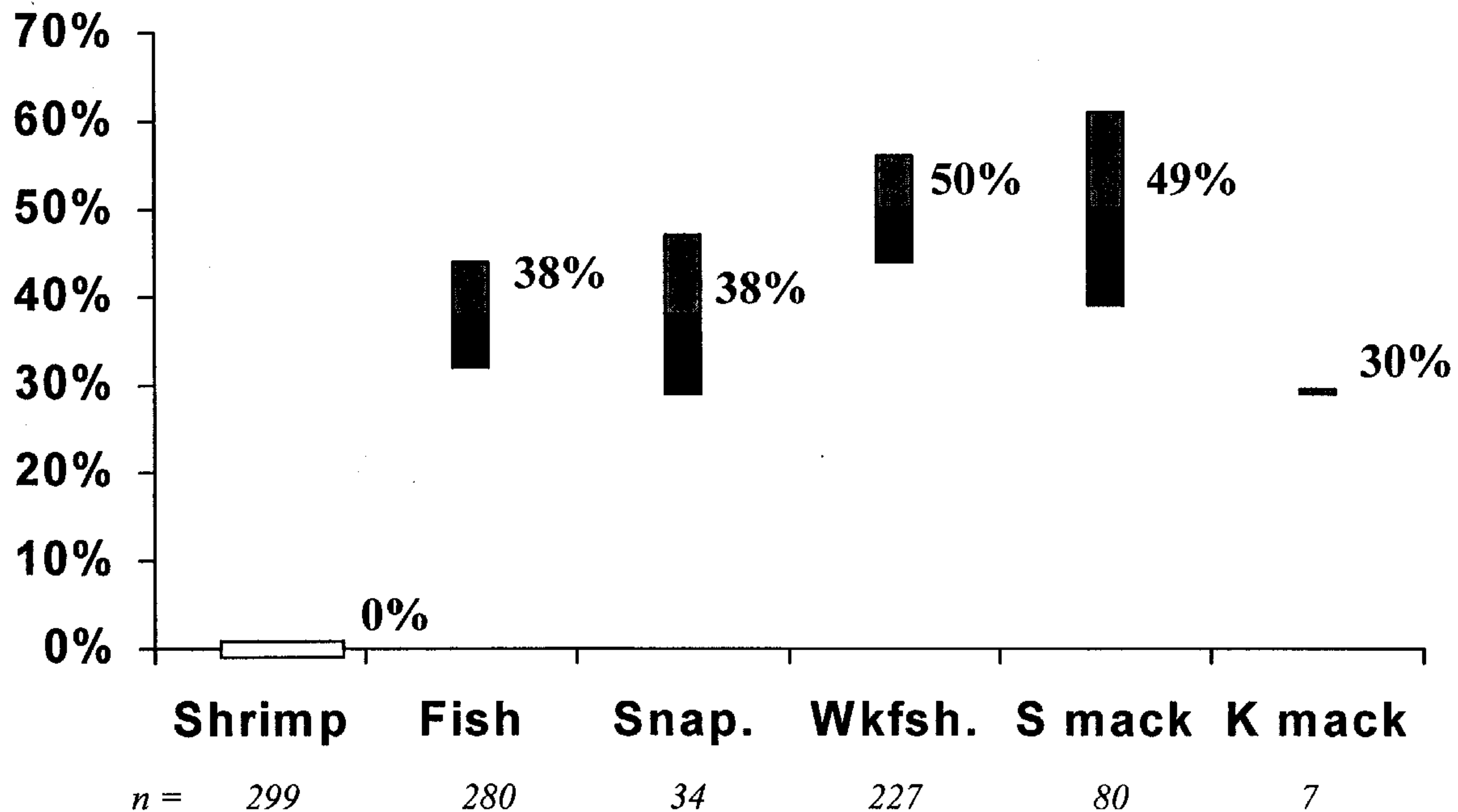
COMBINED EXTENDED FUNNEL REDUCTION RATES



COMBINED EXTENDED FUNNEL

(without vessel Success)

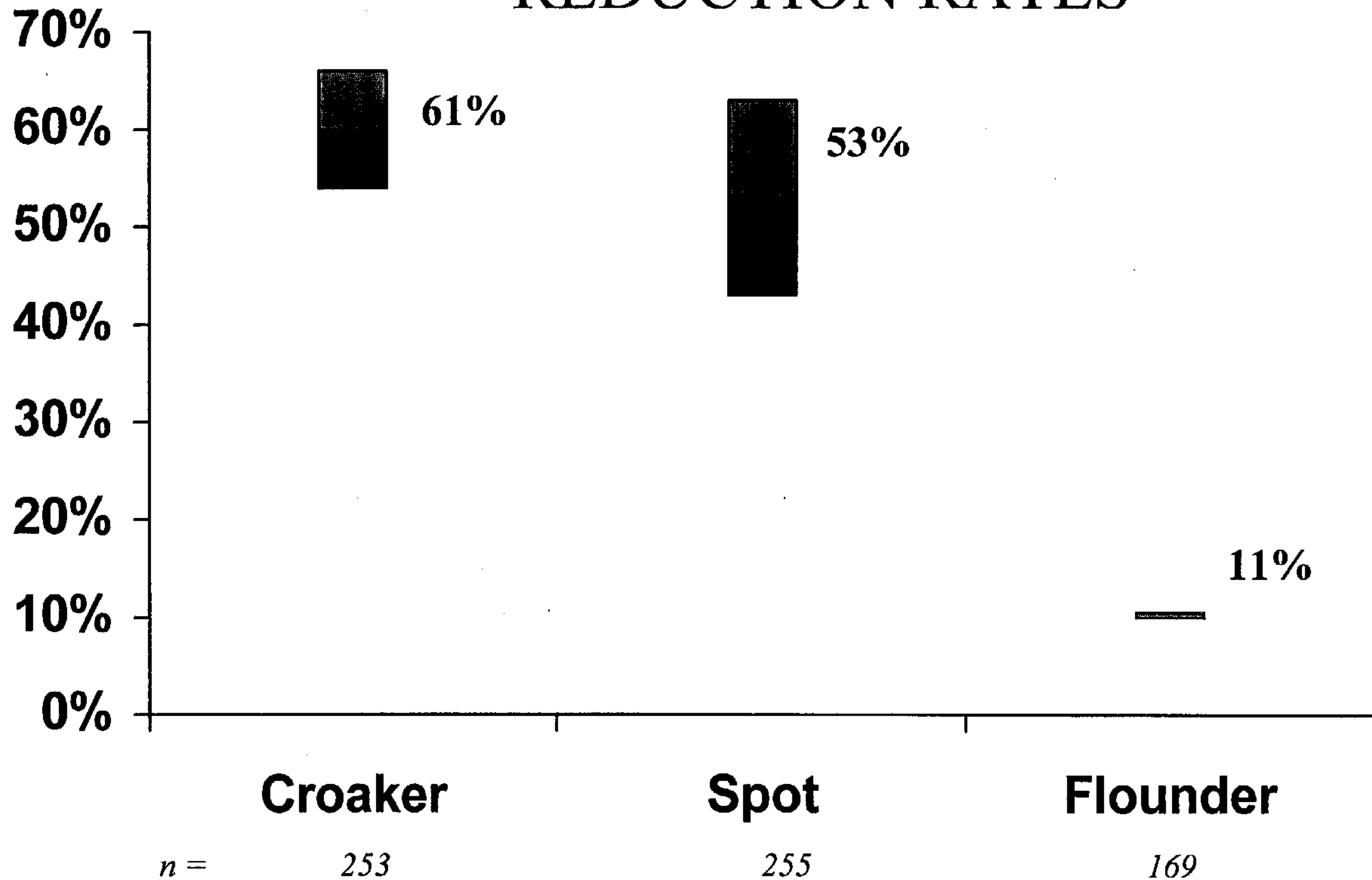
REDUCTION RATES



COMBINED EXTENDED FUNNEL

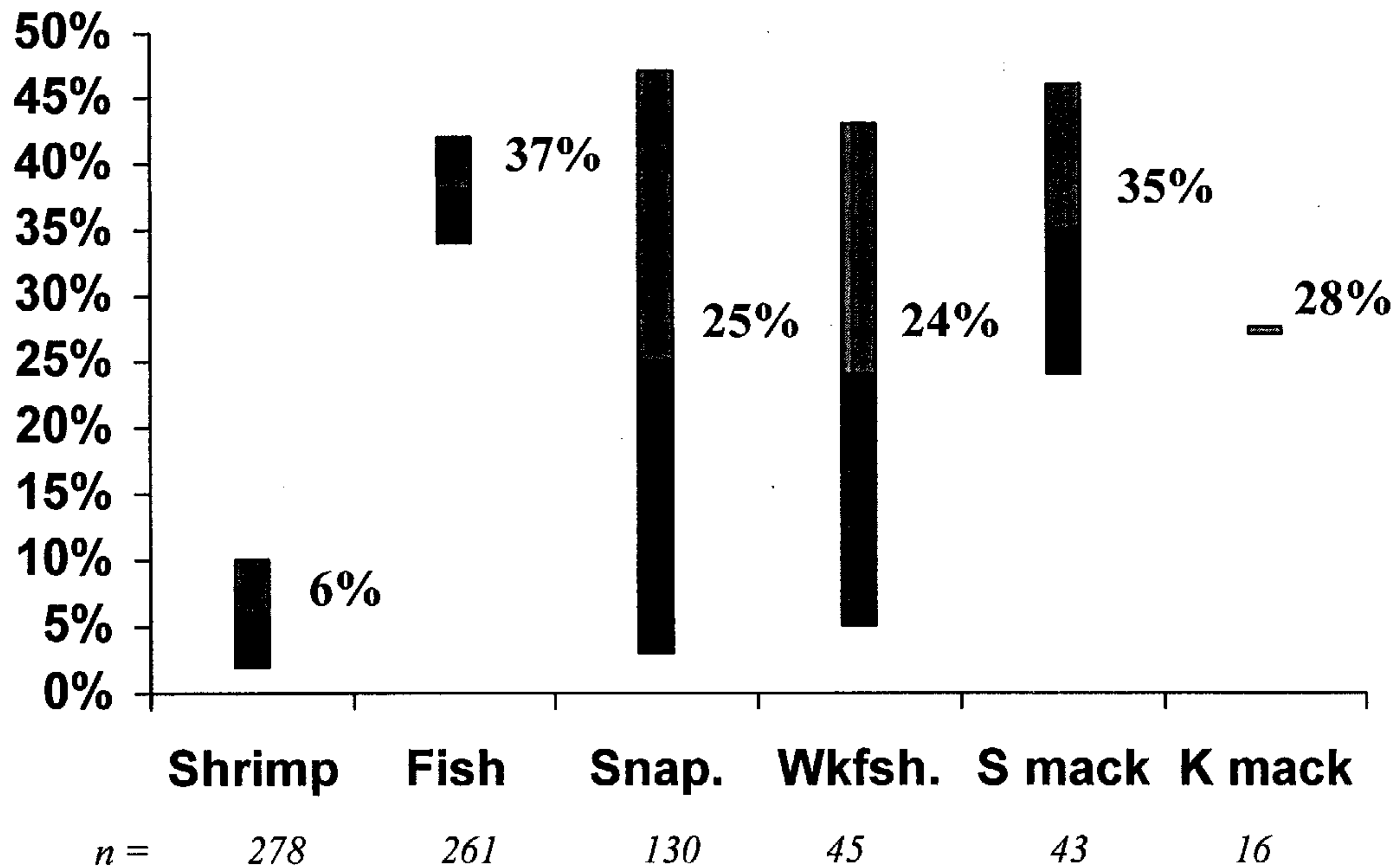
(without vessel Success)

REDUCTION RATES

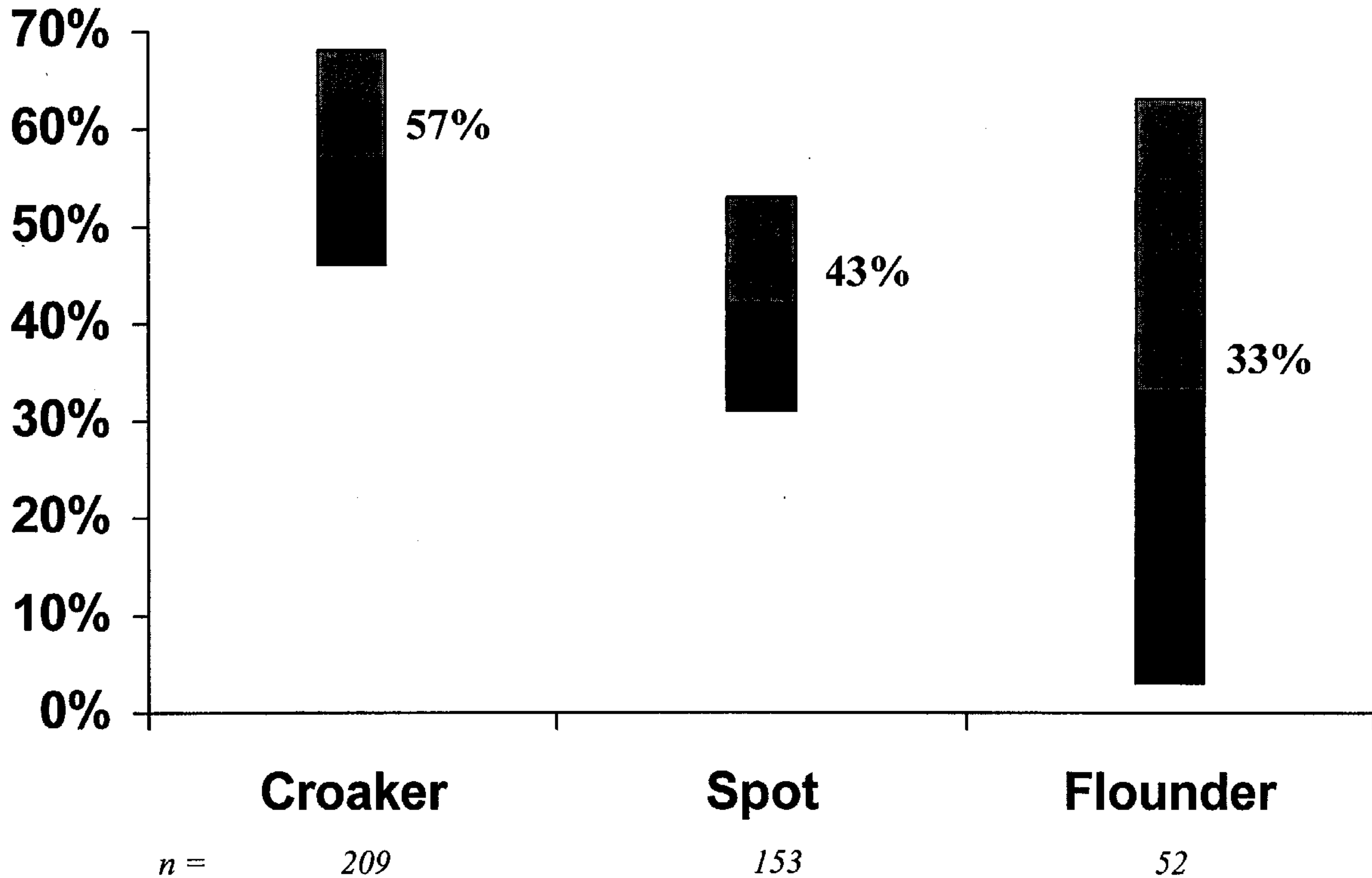


COMBINED FISHEYE (12X5)

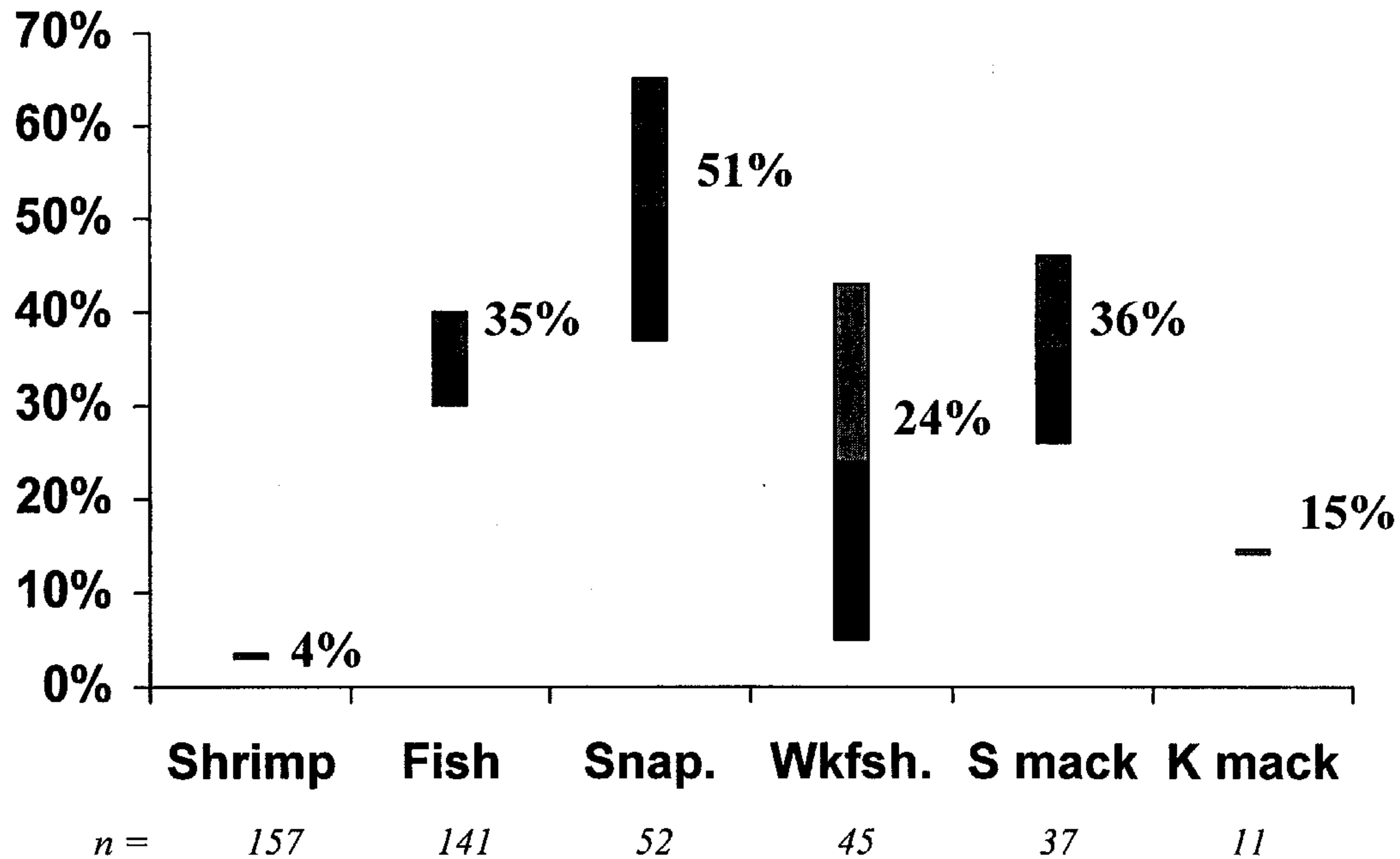
REDUCTION RATES



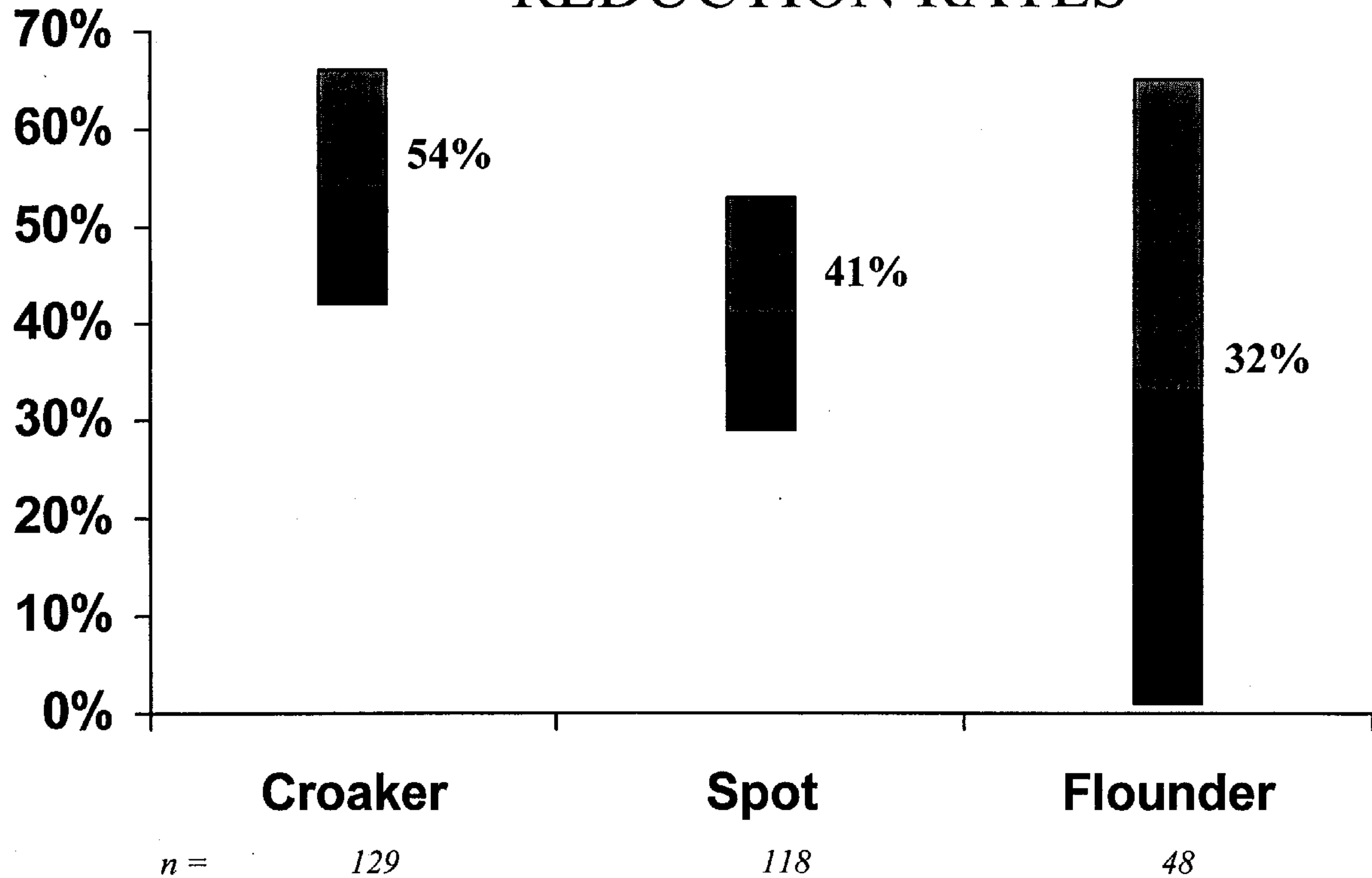
COMBINED FISHEYE (12X5) REDUCTION RATES



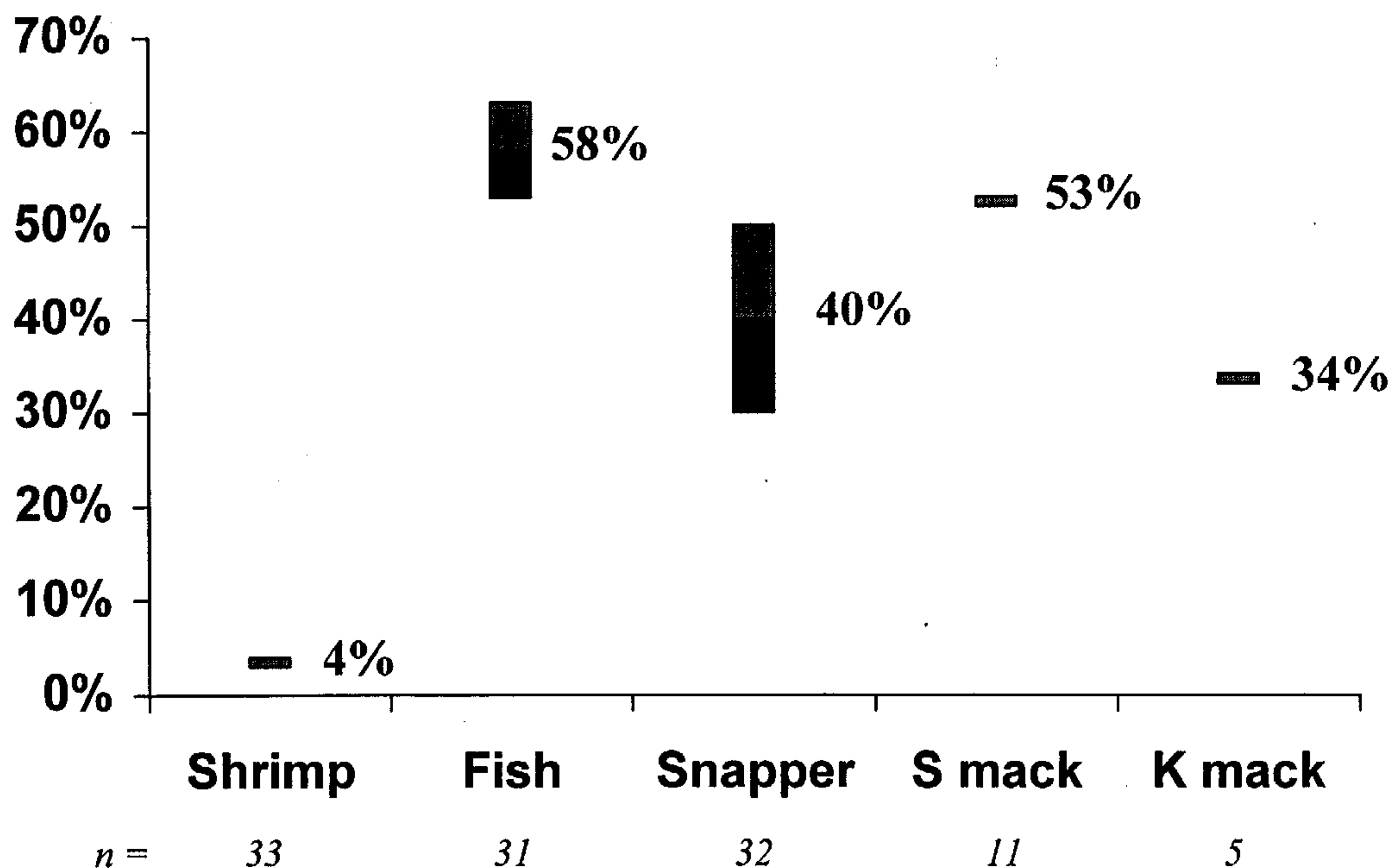
COMBINED FISHEYE (12X5) (without vessel Success) REDUCTION RATES



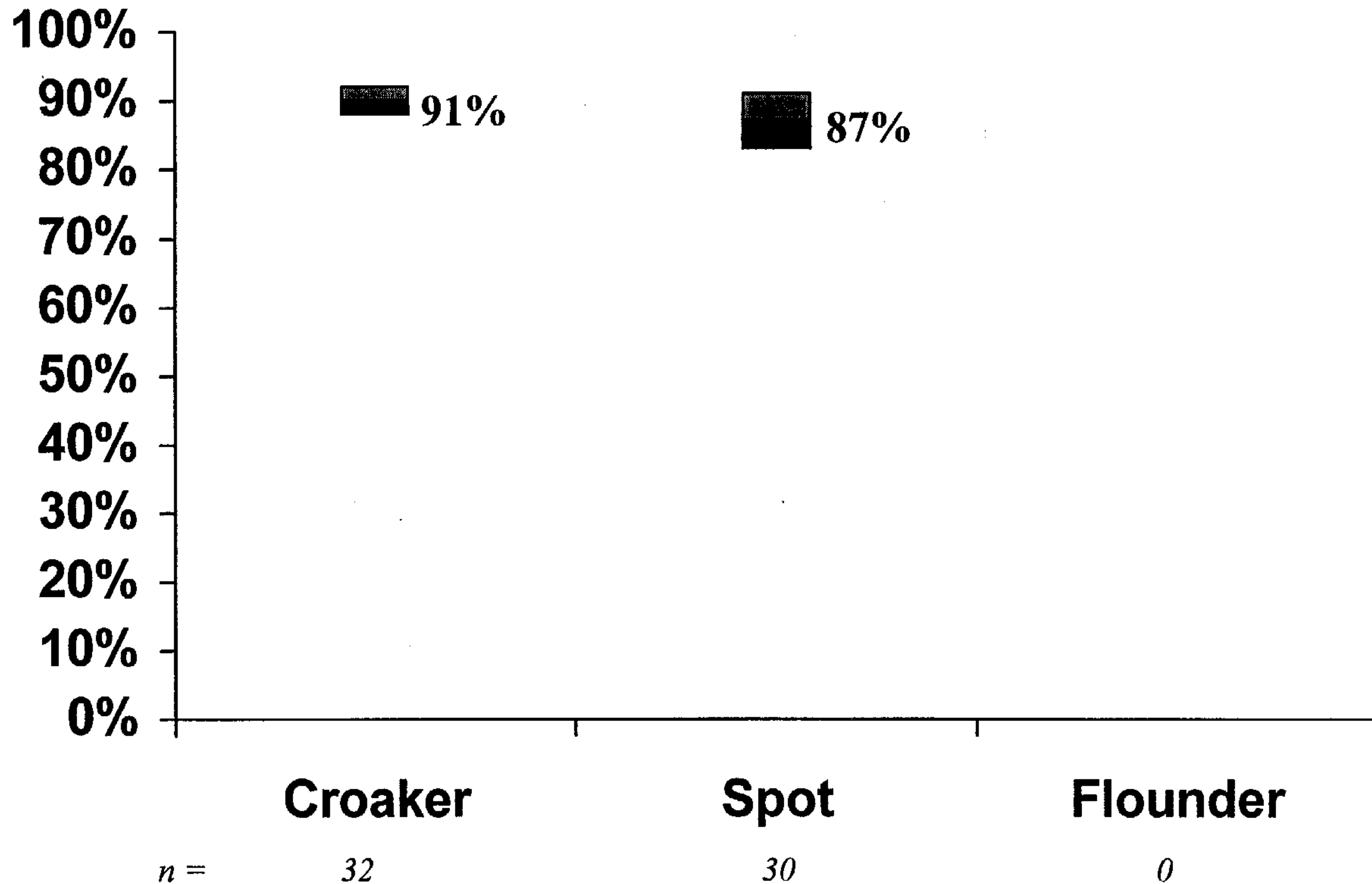
COMBINED FISHEYE (12X5) (without vessel Success) REDUCTION RATES



JONES/DAVIS BRD REDUCTION RATES (GOM)

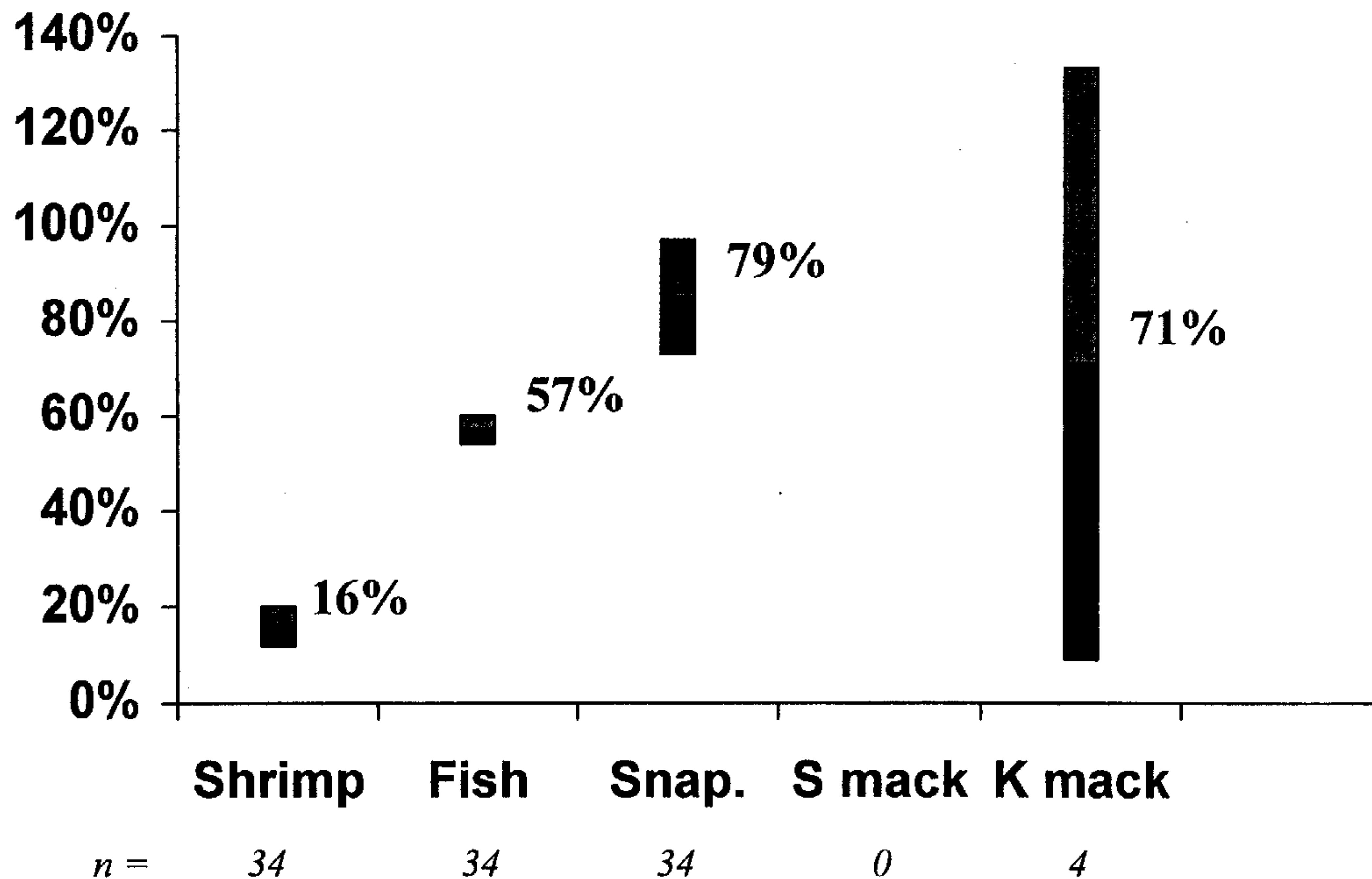


JONES/DAVIS BRD REDUCTION RATES (GOM)



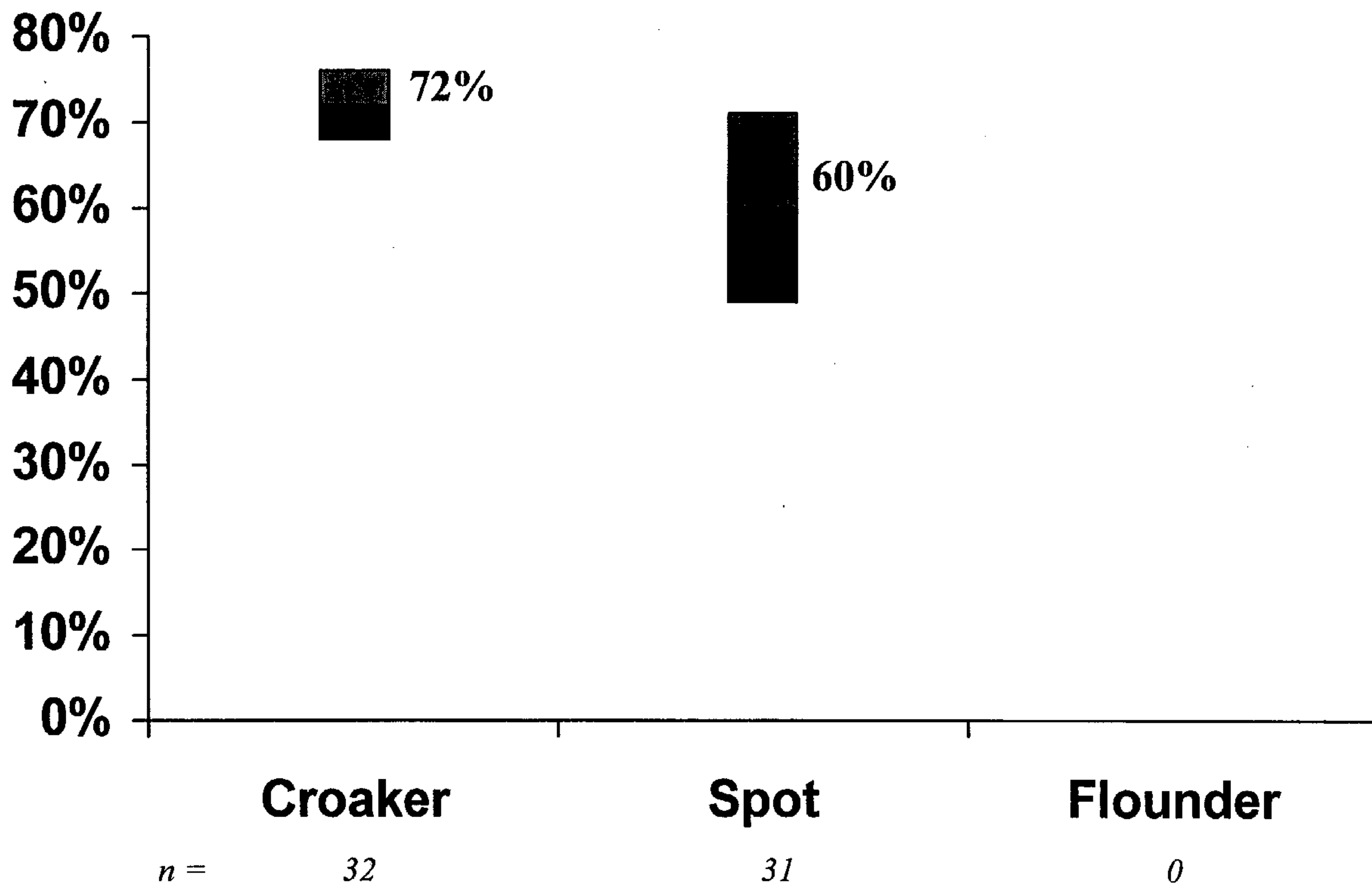
ANDREWS TED

REDUCTION RATES (GOM)



ANDREWS TED

REDUCTION RATES (GOM)



SECTION 3: APPENDIX III

SUMMARY OF STATISTICAL ANALYSES

OBS	BRDTYPE	SPECIES	GORA	N	PREDM	PVALUE	PLLRED	PULRED
1	AAAC	TFIW	G	99	26.51	0.0000	19.33	33.70
2	AAAC	SHRW	G	108	-1.86	0.3353	.	.
3	AAAC	SNAC	G	86	2.09	0.8073	.	.
4	AAAC	SPAC	G	53	45.06	0.0000	28.42	61.70
5	AAAC	KINC	G	51	8.28	0.5526	.	.
6	AAAC	CROW	G	87	64.81	0.0000	59.76	69.85
7	AAAC	SPOW	G	57	74.16	0.0000	66.30	82.01
8	AAAC	SOUC	G	5	69.47	0.1355	.	.
9	AEE0	TFIW	G	194	40.05	0.0000	36.32	43.79
10	AEE0	SHRW	G	196	8.35	0.0000	6.21	10.50
11	AEE0	SNAC	G	126	23.73	0.0452	0.51	46.94
12	AEE0	SPAC	G	15	-51.89	0.5543	.	.
13	AEE0	KINC	G	7	81.24	0.0001	58.95	103.53
14	AEE0	CROW	G	147	75.88	0.0000	70.82	80.94
15	AEE0	SPOW	G	91	41.10	0.0000	28.68	53.51
16	AEE0	SOUC	G	20	77.18	0.0000	59.16	95.20
17	AEPO	TFIW	G	14	4.31	0.8286	.	.
18	AEPO	SHRW	G	21	-0.21	0.9753	.	.
19	AEPO	SPAC	G	16	22.48	0.4245	.	.
20	AEPO	CROW	G	19	-5.99	0.7748	.	.
21	AEPO	SPOW	G	20	-25.05	0.3973	.	.
22	AFEO	TFIW	G	24	50.11	0.0000	43.40	56.83
23	AFEO	SHRW	G	26	3.65	0.5571	.	.
24	AFEO	SNAC	G	23	-25.22	0.4226	.	.
25	AFEO	SPAC	G	12	-2.50	0.9608	.	.
26	AFEO	KINC	G	1	100.00	.	.	.
27	AFEO	CROW	G	25	92.85	0.0000	89.51	96.20
28	AFEO	SPOW	G	21	83.37	0.0000	76.38	90.36
29	AFEO	SOUC	G	3	25.45	0.8346	.	.
30	AIAB	TFIW	G	34	21.60	0.0000	16.51	26.69
31	AIAB	SHRW	G	34	0.45	0.8632	.	.
32	AIAB	SNAC	G	25	5.75	0.7834	.	.
33	AIAB	SPAC	G	1	100.00	.	.	.
34	AIAB	KINC	G	0	.	.	.	.
35	AIAB	CROW	G	12	74.90	0.0000	58.08	91.73
36	AIAB	SPOW	G	20	58.61	0.0000	39.42	77.80
37	AIAB	SOUC	G	4	-134.00	0.4189	.	.
38	AMJO	TFIW	G	45	32.71	0.0000	24.91	40.51
39	AMJO	SHRW	G	45	8.31	0.0000	4.59	12.04
40	AMJO	SNAC	G	38	25.44	0.0062	7.67	43.21
41	AMJO	SPAC	G	1	100.00	.	.	.
42	AMJO	KINC	G	3	37.19	0.2230	.	.
43	AMJO	CROW	G	37	66.51	0.0000	56.37	76.64
44	AMJO	SPOW	G	34	48.49	0.0000	32.56	64.43
45	AMJO	SOUC	G	12	-223.20	0.4358	.	.
46	CAAO	TFIW	A	39	41.07	0.0000	29.16	52.99
47	CAAO	SHRW	A	39	-8.74	0.0044	-14.59	-2.90
48	CAAO	SPAC	A	9	56.73	0.0178	12.38	101.09
49	CAAO	KINC	A	2	-4.76	0.9663	.	.
50	CAAO	CROW	A	21	47.01	0.0480	0.45	93.57
51	CAAO	SPOW	A	35	78.14	0.0000	64.03	92.26
52	CAAO	WEAC	A	34	-4.74	0.7565	.	.
53	CAAO	SOUC	A	10	40.97	0.1443	.	.
54	CEDO	TFIW	A	21	19.68	0.0014	8.54	30.82
55	CEDO	SHRW	A	21	-0.84	0.5686	.	.
56	CEDO	SPAC	A	15	62.55	0.0001	36.24	88.86
57	CEDO	KINC	A	2	-446.50	0.7225	.	.
58	CEDO	CROW	A	16	22.88	0.0206	3.99	41.77
59	CEDO	SPOW	A	16	22.03	0.3077	.	.
60	CEDO	WEAC	A	17	0.60	0.9388	.	.
61	CEDO	SOUC	A	6	38.48	0.4297	.	.
62	CEEO	TFIW	G	15	20.29	0.0096	5.72	34.86
63	CEEO	SHRW	G	26	5.30	0.3618	.	.
64	CEEO	KINC	G	2	-425.00	0.7248	.	.
65	CEEO	CROW	G	15	-1.89	0.8640	.	.
66	CEEO	SPOW	G	13	32.06	0.1285	.	.
67	DAEO	TFIW	G	25	13.36	0.0178	2.52	24.20
68	DAEO	SHRW	G	28	-1.70	0.4859	.	.
69	DAEO	SPAC	G	6	-269.10	0.5686	.	.
70	DAEO	KINC	G	4	-27.70	0.7988	.	.
71	DAEO	CROW	G	24	44.67	0.0010	20.12	69.22
72	DAEO	SPOW	G	27	62.39	0.0001	33.82	90.96
73	DAEO	SOUC	G	7	31.24	0.5476	.	.
74	DEDO	TFIW	G	36	-13.40	0.3668	.	.
75	DEDO	SHRW	G	44	7.27	0.0002	3.63	10.91
76	DEDO	SNAC	G	41	-8.74	0.5207	.	.
77	IAAO	TFIW	A	160	11.11	0.0000	7.15	15.06
78	IAAO	SHRW	A	167	1.28	0.0055	0.38	2.19
79	IAAO	SPAC	A	54	40.21	0.0000	38.10	42.33
80	IAAO	CROW	A	156	11.10	0.0000	7.89	14.31
81	IAAO	SPOW	A	159	13.76	0.0000	11.12	16.41

OBS	BRDTYPE	SPECIES	GORA	N	PREDM	PVALUE	PLLRED	PULRED
82	IAAO	WEAC	A	160	39.01	0.0000	32.31	45.72
83	IAAO	SOUC	A	107	19.27	0.0000	13.42	25.12
84	IEEO	TFIW	A	31	14.11	0.0000	8.08	20.14
85	IEEO	SHRW	A	34	-4.31	0.1752	.	.
86	IEEO	SPAC	A	18	53.42	0.0006	26.50	80.34
87	IEEO	CROW	A	31	17.47	0.2551	.	.
88	IEEO	SPOW	A	32	36.25	0.0001	19.98	52.52
89	IEEO	WEAC	A	32	25.19	0.0829	.	.
90	IEEO	SOUC	A	27	-15.67	0.5622	.	.
91	IMJO	TFIW	A	54	26.39	0.0011	11.09	41.68
92	IMJO	SHRW	A	55	1.45	0.0725	.	.
93	IMJO	CROW	A	54	17.40	0.0000	13.38	21.42
94	IMJO	SPOW	A	55	14.88	0.0000	13.32	16.43
95	IMJO	WEAC	A	39	36.84	0.0000	30.93	42.76
96	IMJO	SOUC	A	41	29.54	0.0000	17.03	42.04
97	JCDO	TFIW	A	32	57.65	0.0000	51.11	64.19
98	JCDO	SHRW	A	32	0.10	0.9778	.	.
99	JCDO	SPAC	A	9	83.69	0.0001	53.60	113.78
100	JCDO	CROW	A	32	66.70	0.0000	60.30	73.10
101	JCDO	SPOW	A	32	73.14	0.0000	62.07	84.22
102	JCDO	WEAC	A	31	54.67	0.0000	47.40	61.95
103	JCDO	SUMC	A	32	-11.25	0.2612	.	.
104	JCDO	SOUC	A	28	27.60	0.0591	.	.
105	OEJO	TFIW	A	60	17.72	0.0086	4.67	30.77
106	OEJO	SHRW	A	60	1.63	0.7673	.	.
107	OEJO	SPAC	A	52	24.74	0.1128	.	.
108	OEJO	CROW	A	59	4.22	0.7105	.	.
109	OEJO	SPOW	A	55	32.48	0.0007	14.48	50.47
110	OEJO	WEAC	A	25	-36.46	0.3759	.	.
111	OEJO	SUMC	A	0	.	.	.	.
112	OEJO	SOUC	A	2	0.00	1.0000	.	.
113	OMDO	TFIW	A	30	13.75	0.2840	.	.
114	OMDO	SHRW	A	30	10.60	0.2405	.	.
115	OMDO	SPAC	A	20	33.89	0.1926	.	.
116	OMDO	KINC	A	6	20.62	0.7883	.	.
117	OMDO	CROW	A	30	39.97	0.0005	18.97	60.97
118	OMDO	SPOW	A	29	41.15	0.0016	16.98	65.32
119	OMDO	WEAC	A	22	28.53	0.0130	6.64	50.42
120	OMDO	SUMC	A	17	27.26	0.0946	.	.
121	OMDO	SOUC	A	24	50.64	0.0001	27.40	73.88
122	RHCO	TFIW	A	31	-4.05	0.5405	.	.
123	RHCO	SHRW	A	31	1.38	0.8471	.	.
124	RHCO	SPAC	A	20	-10.18	0.7642	.	.
125	RHCO	CROW	A	31	-8.61	0.2651	.	.
126	RHCO	SPOW	A	31	8.97	0.3157	.	.
127	RHCO	WEAC	A	31	-18.88	0.0125	-33.39	-4.36
128	RHCO	SUMC	A	27	-23.09	0.4048	.	.
129	RHCO	SOUC	A	18	-6.59	0.8949	.	.
130	TAE0	TFIW	G	56	24.68	0.0000	14.78	34.58
131	TAE0	SHRW	G	60	1.70	0.3723	.	.
132	TAE0	SNAC	G	28	25.13	0.1011	.	.
133	TAE0	SPAC	G	8	-19.32	0.8437	.	.
134	TAE0	KINC	G	13	-66.89	0.5459	.	.
135	TAE0	CROW	G	51	44.22	0.0125	9.92	78.52
136	TAE0	SPOW	G	41	66.58	0.0000	57.29	75.87
137	TAE0	SOUC	G	5	47.96	0.4090	.	.
138	PO00	TFIW	GA	34	56.78	0.0000	53.78	59.77
139	PO00	SHRW	GA	34	16.01	0.0000	12.08	19.94
140	PO00	SNAC	GA	34	78.59	0.0000	72.80	84.37
141	PO00	KINC	GA	4	71.43	0.0331	9.36	133.50
142	PO00	CROW	GA	32	72.33	0.0000	68.11	76.55
143	PO00	SPOW	GA	31	59.99	0.0000	49.48	70.49
144	FO00	TFIW	GA	20	35.40	0.0000	25.24	45.55
145	FO00	SHRW	GA	25	12.19	0.0000	7.20	17.19
146	FO00	SNAC	GA	24	22.99	0.0112	5.72	40.27
147	FO00	SPAC	GA	7	76.31	0.0020	38.71	113.90
148	FO00	KINC	GA	5	1.46	0.9851	.	.
149	FO00	CROW	GA	25	72.76	0.0000	64.63	80.89
150	FO00	SPOW	GA	25	38.22	0.0000	26.21	50.24
151	AA&CD	TFIW	GA	379	34.82	0.0000	29.87	39.76
152	AA&CD	SHRW	GA	399	-0.47	0.4534	.	.
153	AA&CD	SNAC	GA	120	19.45	0.0006	8.48	30.41
154	AA&CD	SPAC	GA	133	48.31	0.0000	39.34	57.28
155	AA&CD	KINC	GA	58	9.89	0.4681	.	.
156	AA&CD	CROW	GA	340	61.38	0.0000	56.30	66.47
157	AA&CD	SPOW	GA	312	53.80	0.0000	44.87	62.73
158	AA&CD	WEAC	GA	227	50.08	0.0000	43.75	56.41
159	AA&CD	SUMC	GA	33	-9.40	0.3406	.	.
160	AA&CD	SOUC	GA	174	11.59	0.3121	.	.
161	EE	TFIW	GA	261	37.21	0.0000	33.68	40.75
162	EE	SHRW	GA	278	5.68	0.0016	2.16	9.19

OBS	BRDTYPE	SPECIES	GORA	N	PREDM	PVALUE	PLLRED	PULRED
163	EE	SNAC	GA	130	24.84	0.0276	2.79	46.90
164	EE	SPAC	GA	43	34.96	0.0000	24.35	45.56
165	EE	KINC	GA	16	27.85	0.4253	.	.
166	EE	CROW	GA	209	56.75	0.0000	45.65	67.84
167	EE	SPOW	GA	153	42.51	0.0000	31.46	53.56
168	EE	WEAC	GA	45	24.10	0.0165	4.61	43.59
169	EE	SOUC	GA	52	33.37	0.0322	2.95	63.80
170	AAACX	SHRW	G	8	-1.42	0.6237	.	.
171	AEEOX	TFIW	G	74	38.72	0.0000	33.56	43.89
172	AEEOX	SHRW	G	75	5.68	0.0116	1.31	10.05
173	AEEOX	SNAC	G	48	51.99	0.0000	36.55	67.44
174	AEEOX	SPAC	G	9	-57.67	0.5958	.	.
175	AEEOX	KINC	G	2	100.00	.	100.00	100.00
176	AEEOX	CROW	G	67	74.54	0.0000	68.78	80.30
177	AEEOX	SPOW	G	56	36.65	0.0000	21.80	51.50
178	AEEOX	SOUC	G	16	76.91	0.0000	57.44	96.39
179	AA&CDX	TFIW	GA	280	38.10	0.0000	32.17	44.02
180	AA&CDX	SHRW	GA	299	-0.19	0.7484	.	.
181	AA&CDX	SNAC	GA	34	38.23	0.0000	29.12	47.35
182	AA&CDX	SPAC	GA	80	49.20	0.0000	38.69	59.71
183	AA&CDX	KINC	GA	7	30.17	0.6205	.	.
184	AA&CDX	CROW	GA	253	60.59	0.0000	54.31	66.88
185	AA&CDX	SPOW	GA	255	52.49	0.0000	42.73	62.24
186	AA&CDX	WEAC	GA	227	50.08	0.0000	43.75	56.41
187	AA&CDX	SUMC	GA	33	-9.40	0.3406	.	.
188	AA&CDX	SOUC	GA	169	11.44	0.3200	.	.
189	EEX	TFIW	GA	141	34.63	0.0000	30.04	39.22
190	EEX	SHRW	GA	157	3.67	0.1626	.	.
191	EEX	SNAC	GA	52	50.79	0.0000	36.80	64.77
192	EEX	SPAC	GA	37	36.34	0.0000	26.19	46.48
193	EEX	KINC	GA	11	14.80	0.7469	.	.
194	EEX	CROW	GA	129	54.37	0.0000	42.07	66.67
195	EEX	SPOW	GA	118	40.91	0.0000	28.72	53.10
196	EEX	WEAC	GA	45	24.10	0.0165	4.61	43.59
197	EEX	SOUC	GA	48	32.11	0.0462	0.56	63.66

OBS	BRDTYPE	SPECIES	GORA	N	PREDM	PVALUE	PLLRED	PULRED
1	AAAC	CROW	G	87	64.81	0.0000	59.76	69.85
2	AEEO	CROW	G	147	75.88	0.0000	70.82	80.94
3	AEPO	CROW	G	19	-5.99	0.7748	.	.
4	AFEO	CROW	G	25	92.85	0.0000	89.51	96.20
5	AIAB	CROW	G	12	74.90	0.0000	58.08	91.73
6	AMJO	CROW	G	37	66.51	0.0000	56.37	76.64
7	CAAO	CROW	A	21	47.01	0.0480	0.45	93.57
8	CEDO	CROW	A	16	22.88	0.0206	3.99	41.77
9	CEEO	CROW	G	15	-1.89	0.8640	.	.
10	DAEO	CROW	G	24	44.67	0.0010	20.12	69.22
11	IAAO	CROW	A	156	11.10	0.0000	7.89	14.31
12	IEEO	CROW	A	31	17.47	0.2551	.	.
13	IMJO	CROW	A	54	17.40	0.0000	13.38	21.42
14	JCDO	CROW	A	32	66.70	0.0000	60.30	73.10
15	OEJO	CROW	A	59	4.22	0.7105	.	.
16	OMDO	CROW	A	30	39.97	0.0005	18.97	60.97
17	RHCO	CROW	A	31	-8.61	0.2651	.	.
18	TAE0	CROW	G	51	44.22	0.0125	9.92	78.52
19	POOO	CROW	GA	32	72.33	0.0000	68.11	76.55
20	FOOO	CROW	GA	25	72.76	0.0000	64.63	80.89
21	AA&CD	CROW	GA	340	61.38	0.0000	56.30	66.47
22	EE	CROW	GA	209	56.75	0.0000	45.65	67.84
23	AEEOX	CROW	G	67	74.54	0.0000	68.78	80.30
24	AA&CDX	CROW	GA	253	60.59	0.0000	54.31	66.88
25	EEX	CROW	GA	129	54.37	0.0000	42.07	66.67
26	AAAC	KINC	G	51	8.28	0.5526	.	.
27	AEEO	KINC	G	7	81.24	0.0001	58.95	103.53
28	AFEO	KINC	G	1	100.00	.	.	.
29	AIAB	KINC	G	0	.	.	.	.
30	AMJO	KINC	G	3	37.19	0.2230	.	.
31	CAAO	KINC	A	2	-4.76	0.9663	.	.
32	CEDO	KINC	A	2	-446.50	0.7225	.	.
33	CEEO	KINC	G	2	-425.00	0.7248	.	.
34	DAEO	KINC	G	4	-27.70	0.7988	.	.
35	OMDO	KINC	A	6	20.62	0.7883	.	.
36	TAE0	KINC	G	13	-66.89	0.5459	.	.
37	POOO	KINC	GA	4	71.43	0.0331	9.36	133.50
38	FOOO	KINC	GA	5	1.46	0.9851	.	.
39	AA&CD	KINC	GA	58	9.89	0.4681	.	.
40	EE	KINC	GA	16	27.85	0.4253	.	.
41	AEEOX	KINC	G	2	100.00	.	100.00	100.00
42	AA&CDX	KINC	GA	7	30.17	0.6205	.	.
43	EEX	KINC	GA	11	14.80	0.7469	.	.
44	AAAC	SHRW	G	108	-1.86	0.3353	.	.
45	AEEO	SHRW	G	196	8.35	0.0000	6.21	10.50
46	AEPO	SHRW	G	21	-0.21	0.9753	.	.
47	AFEO	SHRW	G	26	3.65	0.5571	.	.
48	AIAB	SHRW	G	34	0.45	0.8632	.	.
49	AMJO	SHRW	G	45	8.31	0.0000	4.59	12.04
50	CAAO	SHRW	A	39	-8.74	0.0044	-14.59	-2.90
51	CEDO	SHRW	A	21	-0.84	0.5686	.	.
52	CEEO	SHRW	G	26	5.30	0.3618	.	.
53	DAEO	SHRW	G	28	-1.70	0.4859	.	.
54	DEDO	SHRW	G	44	7.27	0.0002	3.63	10.91
55	IAAO	SHRW	A	167	1.28	0.0055	0.38	2.19
56	IEEO	SHRW	A	34	-4.31	0.1752	.	.
57	IMJO	SHRW	A	55	1.45	0.0725	.	.
58	JCDO	SHRW	A	32	0.10	0.9778	.	.
59	OEJO	SHRW	A	60	1.63	0.7673	.	.
60	OMDO	SHRW	A	30	10.60	0.2405	.	.
61	RHCO	SHRW	A	31	1.38	0.8471	.	.
62	TAE0	SHRW	G	60	1.70	0.3723	.	.
63	POOO	SHRW	GA	34	16.01	0.0000	12.08	19.94
64	FOOO	SHRW	GA	25	12.19	0.0000	7.20	17.19
65	AA&CD	SHRW	GA	399	-0.47	0.4534	.	.
66	EE	SHRW	GA	278	5.68	0.0016	2.16	9.19
67	AAACX	SHRW	G	8	-1.42	0.6237	.	.
68	AEEOX	SHRW	G	75	5.68	0.0116	1.31	10.05
69	AA&CDX	SHRW	GA	299	-0.19	0.7484	.	.
70	EEX	SHRW	GA	157	3.67	0.1626	.	.
71	AAAC	SNAC	G	86	2.09	0.8073	.	.
72	AEEO	SNAC	G	126	23.73	0.0452	0.51	46.94
73	AFEO	SNAC	G	23	-25.22	0.4226	.	.
74	AIAB	SNAC	G	25	5.75	0.7834	.	.
75	AMJO	SNAC	G	38	25.44	0.0062	7.67	43.21
76	DEDO	SNAC	G	41	-8.74	0.5207	.	.
77	TAE0	SNAC	G	28	25.13	0.1011	.	.
78	POOO	SNAC	GA	34	78.59	0.0000	72.80	84.37
79	FOOO	SNAC	GA	24	22.99	0.0112	5.72	40.27
80	AA&CD	SNAC	GA	120	19.45	0.0006	8.48	30.41
81	EE	SNAC	GA	130	24.84	0.0276	2.79	46.90

OBS	BRDTYPE	SPECIES	GORA	N	PREDM	PVALUE	PLLRED	PULRED
82	AEEOX	SNAC	G	48	51.99	0.0000	36.55	67.44
83	AA&CDX	SNAC	GA	34	38.23	0.0000	29.12	47.35
84	EEX	SNAC	GA	52	50.79	0.0000	36.80	64.77
85	AAAC	SOUC	G	5	69.47	0.1355	.	.
86	AEE0	SOUC	G	20	77.18	0.0000	59.16	95.20
87	AFEO	SOUC	G	3	25.45	0.8346	.	.
88	AIAB	SOUC	G	4	-134.00	0.4189	.	.
89	AMJO	SOUC	G	12	-223.20	0.4358	.	.
90	CAAO	SOUC	A	10	40.97	0.1443	.	.
91	CEDO	SOUC	A	6	38.48	0.4297	.	.
92	DAEO	SOUC	G	7	31.24	0.5476	.	.
93	IAAO	SOUC	A	107	19.27	0.0000	13.42	25.12
94	IEEO	SOUC	A	27	-15.67	0.5622	.	.
95	IMJO	SOUC	A	41	29.54	0.0000	17.03	42.04
96	JCDO	SOUC	A	28	27.60	0.0591	.	.
97	OEJO	SOUC	A	2	0.00	1.0000	.	.
98	OMDO	SOUC	A	24	50.64	0.0001	27.40	73.88
99	RHCO	SOUC	A	18	-6.59	0.8949	.	.
100	TAEO	SOUC	G	5	47.96	0.4090	.	.
101	AA&CD	SOUC	GA	174	11.59	0.3121	.	.
102	EE	SOUC	GA	52	33.37	0.0322	2.95	63.80
103	AEEOX	SOUC	G	16	76.91	0.0000	57.44	96.39
104	AA&CDX	SOUC	GA	169	11.44	0.3200	.	.
105	EEX	SOUC	GA	48	32.11	0.0462	0.56	63.66
106	AAAC	SPAC	G	53	45.06	0.0000	28.42	61.70
107	AEE0	SPAC	G	15	-51.89	0.5543	.	.
108	AEPO	SPAC	G	16	22.48	0.4245	.	.
109	AFEO	SPAC	G	12	-2.50	0.9608	.	.
110	AIAB	SPAC	G	1	100.00	.	.	.
111	AMJO	SPAC	G	1	100.00	.	.	.
112	CAAO	SPAC	A	9	56.73	0.0178	12.38	101.09
113	CEDO	SPAC	A	15	62.55	0.0001	36.24	88.86
114	DAEO	SPAC	G	6	-269.10	0.5686	.	.
115	IAAO	SPAC	A	54	40.21	0.0000	38.10	42.33
116	IEEO	SPAC	A	18	53.42	0.0006	26.50	80.34
117	JCDO	SPAC	A	9	83.69	0.0001	53.60	113.78
118	OEJO	SPAC	A	52	24.74	0.1128	.	.
119	OMDO	SPAC	A	20	33.89	0.1926	.	.
120	RHCO	SPAC	A	20	-10.18	0.7642	.	.
121	TAEO	SPAC	G	8	-19.32	0.8437	.	.
122	FOOO	SPAC	GA	7	76.31	0.0020	38.71	113.90
123	AA&CD	SPAC	GA	133	48.31	0.0000	39.34	57.28
124	EE	SPAC	GA	43	34.96	0.0000	24.35	45.56
125	AEEOX	SPAC	G	9	-57.67	0.5958	.	.
126	AA&CDX	SPAC	GA	80	49.20	0.0000	38.69	59.71
127	EEX	SPAC	GA	37	36.34	0.0000	26.19	46.48
128	AAAC	SPOW	G	57	74.16	0.0000	66.30	82.01
129	AEE0	SPOW	G	91	41.10	0.0000	28.68	53.51
130	AEPO	SPOW	G	20	-25.05	0.3973	.	.
131	AFEO	SPOW	G	21	83.37	0.0000	76.38	90.36
132	AIAB	SPOW	G	20	58.61	0.0000	39.42	77.80
133	AMJO	SPOW	G	34	48.49	0.0000	32.56	64.43
134	CAAO	SPOW	A	35	78.14	0.0000	64.03	92.26
135	CEDO	SPOW	A	16	22.03	0.3077	.	.
136	CEEO	SPOW	G	13	32.06	0.1285	.	.
137	DAEO	SPOW	G	27	62.39	0.0001	33.82	90.96
138	IAAO	SPOW	A	159	13.76	0.0000	11.12	16.41
139	IEEO	SPOW	A	32	36.25	0.0001	19.98	52.52
140	IMJO	SPOW	A	55	14.88	0.0000	13.32	16.43
141	JCDO	SPOW	A	32	73.14	0.0000	62.07	84.22
142	OEJO	SPOW	A	55	32.48	0.0007	14.48	50.47
143	OMDO	SPOW	A	29	41.15	0.0016	16.98	65.32
144	RHCO	SPOW	A	31	8.97	0.3157	.	.
145	TAEO	SPOW	G	41	66.58	0.0000	57.29	75.87
146	POOO	SPOW	GA	31	59.99	0.0000	49.48	70.49
147	FOOO	SPOW	GA	25	38.22	0.0000	26.21	50.24
148	AA&CD	SPOW	GA	312	53.80	0.0000	44.87	62.73
149	EE	SPOW	GA	153	42.51	0.0000	31.46	53.56
150	AEEOX	SPOW	G	56	36.65	0.0000	21.80	51.50
151	AA&CDX	SPOW	GA	255	52.49	0.0000	42.73	62.24
152	EEX	SPOW	GA	118	40.91	0.0000	28.72	53.10
153	JCDO	SUMC	A	32	-11.25	0.2612	.	.
154	OEJO	SUMC	A	0	.	.	.	.
155	OMDO	SUMC	A	17	27.26	0.0946	.	.
156	RHCO	SUMC	A	27	-23.09	0.4048	.	.
157	AA&CD	SUMC	GA	33	-9.40	0.3406	.	.
158	AA&CDX	SUMC	GA	33	-9.40	0.3406	.	.
159	AAAC	TFIW	G	99	26.51	0.0000	19.33	33.70
160	AEE0	TFIW	G	194	40.05	0.0000	36.32	43.79
161	AEPO	TFIW	G	14	4.31	0.8286	.	.
162	AFEO	TFIW	G	24	50.11	0.0000	43.40	56.83

OBS	BRDTYPE	SPECIES	GORA	N	PREDM	PVALUE	PLLRED	PULRED
163	AIAB	TFIW	G	34	21.60	0.0000	16.51	26.69
164	AMJO	TFIW	G	45	32.71	0.0000	24.91	40.51
165	CAAO	TFIW	A	39	41.07	0.0000	29.16	52.99
166	CEDO	TFIW	A	21	19.68	0.0014	8.54	30.82
167	CEEO	TFIW	G	15	20.29	0.0096	5.72	34.86
168	DAEO	TFIW	G	25	13.36	0.0178	2.52	24.20
169	DEDO	TFIW	G	36	-13.40	0.3668	.	.
170	IAAO	TFIW	A	160	11.11	0.0000	7.15	15.06
171	IEEO	TFIW	A	31	14.11	0.0000	8.08	20.14
172	IMJO	TFIW	A	54	26.39	0.0011	11.09	41.68
173	JCDO	TFIW	A	32	57.65	0.0000	51.11	64.19
174	OEJO	TFIW	A	60	17.72	0.0086	4.67	30.77
175	OMDO	TFIW	A	30	13.75	0.2840	.	.
176	RHCO	TFIW	A	31	-4.05	0.5405	.	.
177	TAE0	TFIW	G	56	24.68	0.0000	14.78	34.58
178	POOO	TFIW	GA	34	56.78	0.0000	53.78	59.77
179	FOOO	TFIW	GA	20	35.40	0.0000	25.24	45.55
180	AA&CD	TFIW	GA	379	34.82	0.0000	29.87	39.76
181	EE	TFIW	GA	261	37.21	0.0000	33.68	40.75
182	AEE0X	TFIW	G	74	38.72	0.0000	33.56	43.89
183	AA&CDX	TFIW	GA	280	38.10	0.0000	32.17	44.02
184	EEX	TFIW	GA	141	34.63	0.0000	30.04	39.22
185	CAAO	WEAC	A	34	-4.74	0.7565	.	.
186	CEDO	WEAC	A	17	0.60	0.9388	.	.
187	IAAO	WEAC	A	160	39.01	0.0000	32.31	45.72
188	IEEO	WEAC	A	32	25.19	0.0829	.	.
189	IMJO	WEAC	A	39	36.84	0.0000	30.93	42.76
190	JCDO	WEAC	A	31	54.67	0.0000	47.40	61.95
191	OEJO	WEAC	A	25	-36.46	0.3759	.	.
192	OMDO	WEAC	A	22	28.53	0.0130	6.64	50.42
193	RHCO	WEAC	A	31	-18.88	0.0125	-33.39	-4.36
194	AA&CD	WEAC	GA	227	50.08	0.0000	43.75	56.41
195	EE	WEAC	GA	45	24.10	0.0165	4.61	43.59
196	AA&CDX	WEAC	GA	227	50.08	0.0000	43.75	56.41
197	EEX	WEAC	GA	45	24.10	0.0165	4.61	43.59

SECTION 3: APPENDIX IV

TECHNICAL SPECIFICATIONS AND MINIMUM REQUIREMENTS FOR CERTIFIED BRD DESIGNS

TECHNICAL SPECIFICATIONS AND MINIMUM REQUIREMENTS FOR THE FISHEYE BRD

Fisheye Description

Approved fisheyes are cone shaped rigid frames constructed from aluminum or steel which are inserted into the top center of the codend to form an escape opening.

Minimum Construction and Installation Requirements

Fisheyes should be constructed of aluminum or steel rod of at least 1/4" diameter with a minimum opening dimension of 5 inches and a minimum total opening area of 36 square inches. Fisheyes must be installed in the codend of the trawl to create an opening in the trawl facing in the direction of the mouth of the trawl no further forward than 70% of the distance between the codend drawstring (tie off rings) and the beginning of the codend (excluding any extension) or 11 ft, whichever is the shorter distance.

INSTRUCTIONS FOR FISHEYE BRD
National Marine Fisheries Service, Mississippi Laboratories
P.O. Drawer 1207, Pascagoula, MS 39568-1207

November, 1996

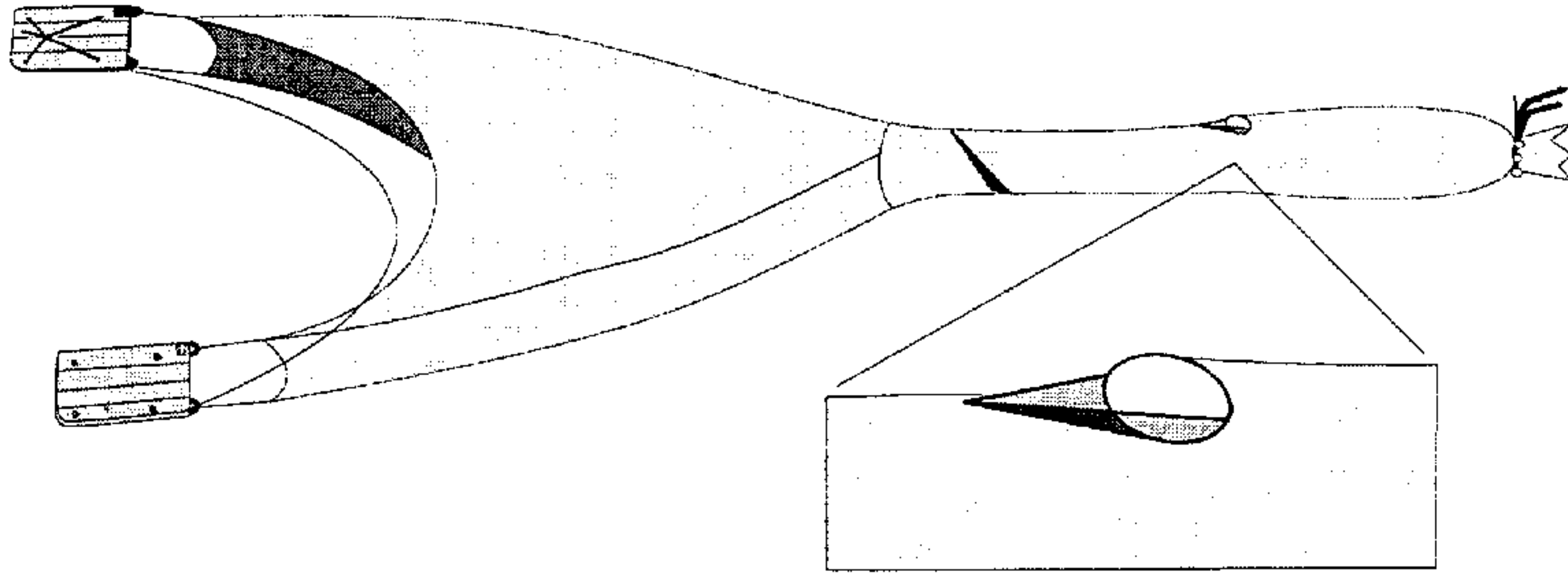


Figure 1. Construction of the Fisheye Frame

The fisheye frame is constructed of steel or aluminum rod of at least 1/4 in. diameter. It consists of an exit opening frame with an apex of three bars to orient the exit opening. The exit opening frame has varying shapes but should not have a diameter any smaller than five inches or total exit opening area of smaller than 36 sq. inches.

Figure 2. Placement of the Fisheye in the Trawl

The fisheye frame should be installed in the trawl with the apex pointing forward. It must be installed in the trawl codend not farther than 70% of the distance between the codend drawstring (tie-off rings) and the beginning of the codend or 11ft., whichever is the shorter distance.

Figure 3. Example of Fisheye Installation

The following is an example of the proper installation of a 6" x 12" fisheye in a 120 mesh bag. Proper installation will vary depending on the frame and codend sizes.

Starting with a codend that is 120 X 120 meshes of 1-5/8 (#42) nylon webbing, count down the seam 32 1/2 meshes (70% of the distance between the tie-off rings and the front of the codend) from the forward edge of the codend. Cut the exit opening perpendicular to the seam. For a 6" X 12" frame, an exit opening of 20 meshes (10 on each side of the seam) should be cut.

The frame is installed in the webbing by orienting the frame so the apex is pointed toward the front of the trawl and the center apex bar is against the webbing. The forward side of the exit opening cut is laced on the inner portion of the frame opening. The aft side of the cut is laced on the outer portion. The frame apex is then laced to the trawl webbing to secure the frame.

Figure 1.

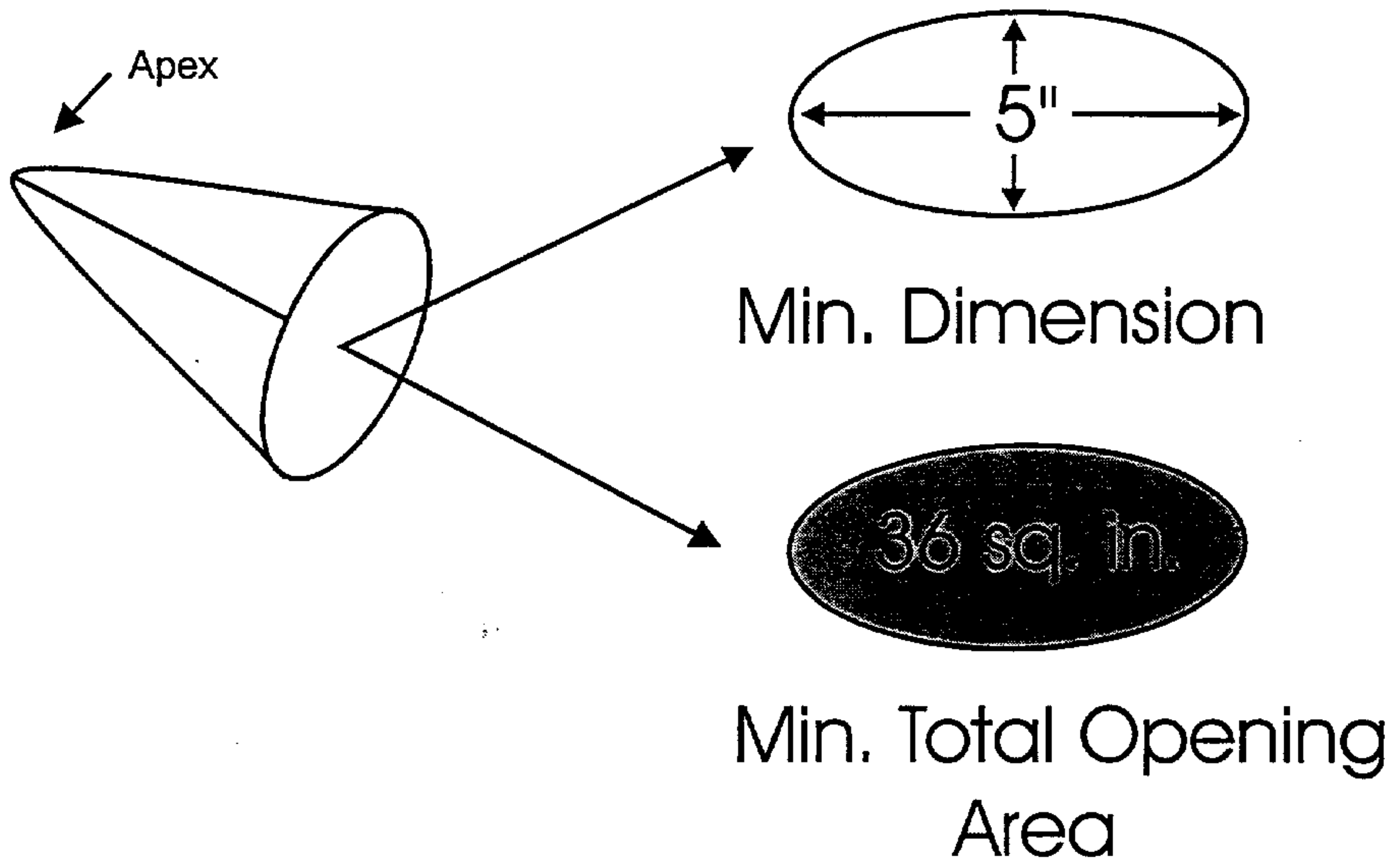


Figure 2.

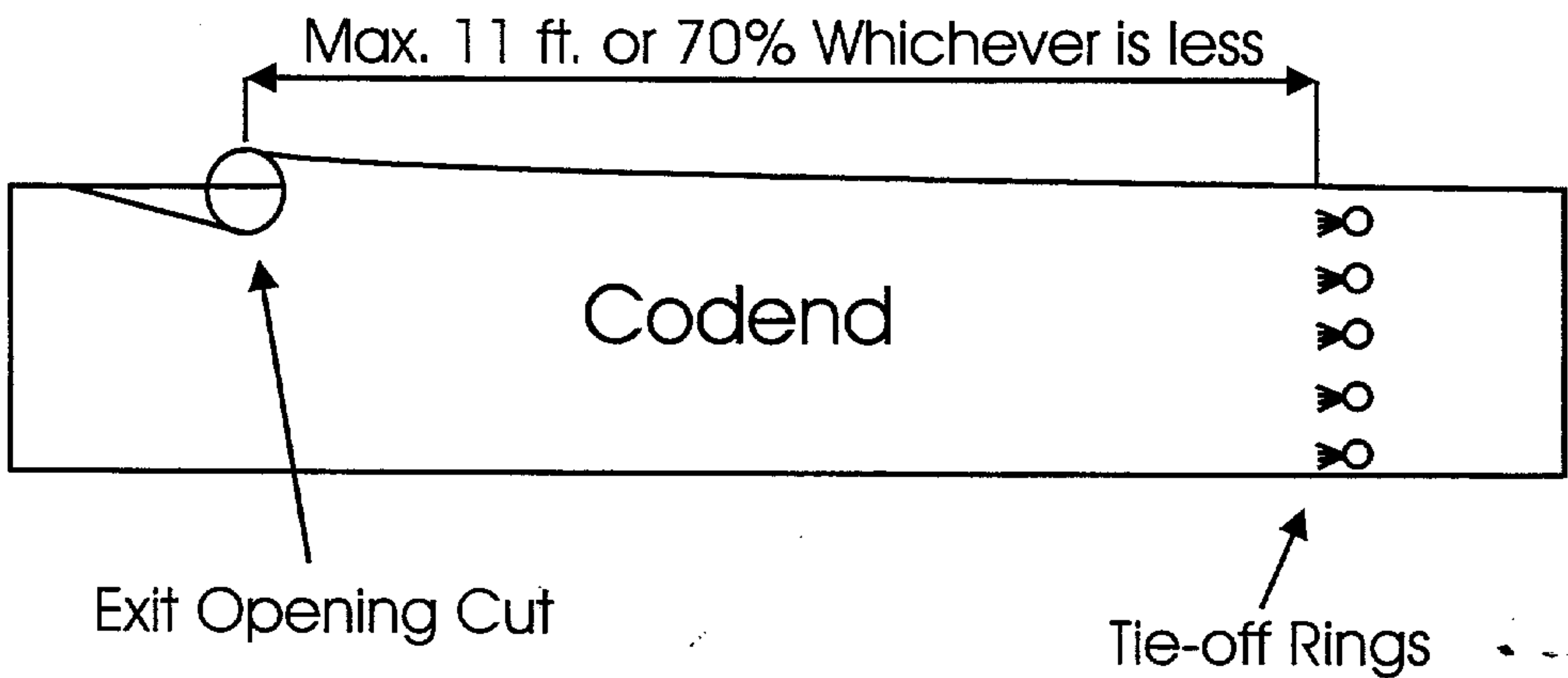
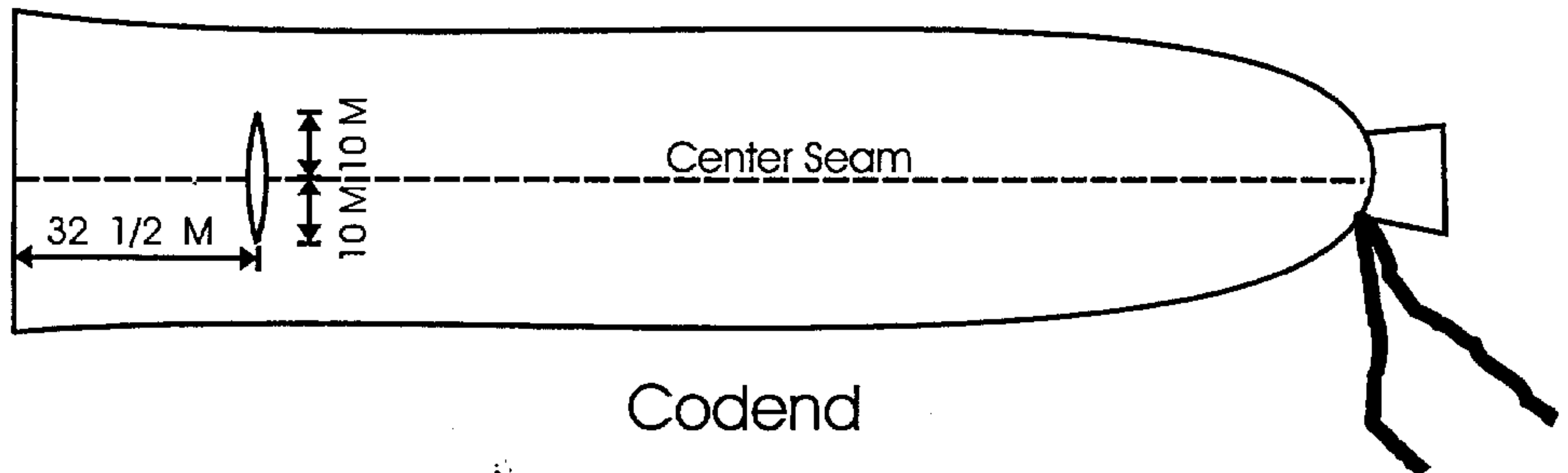
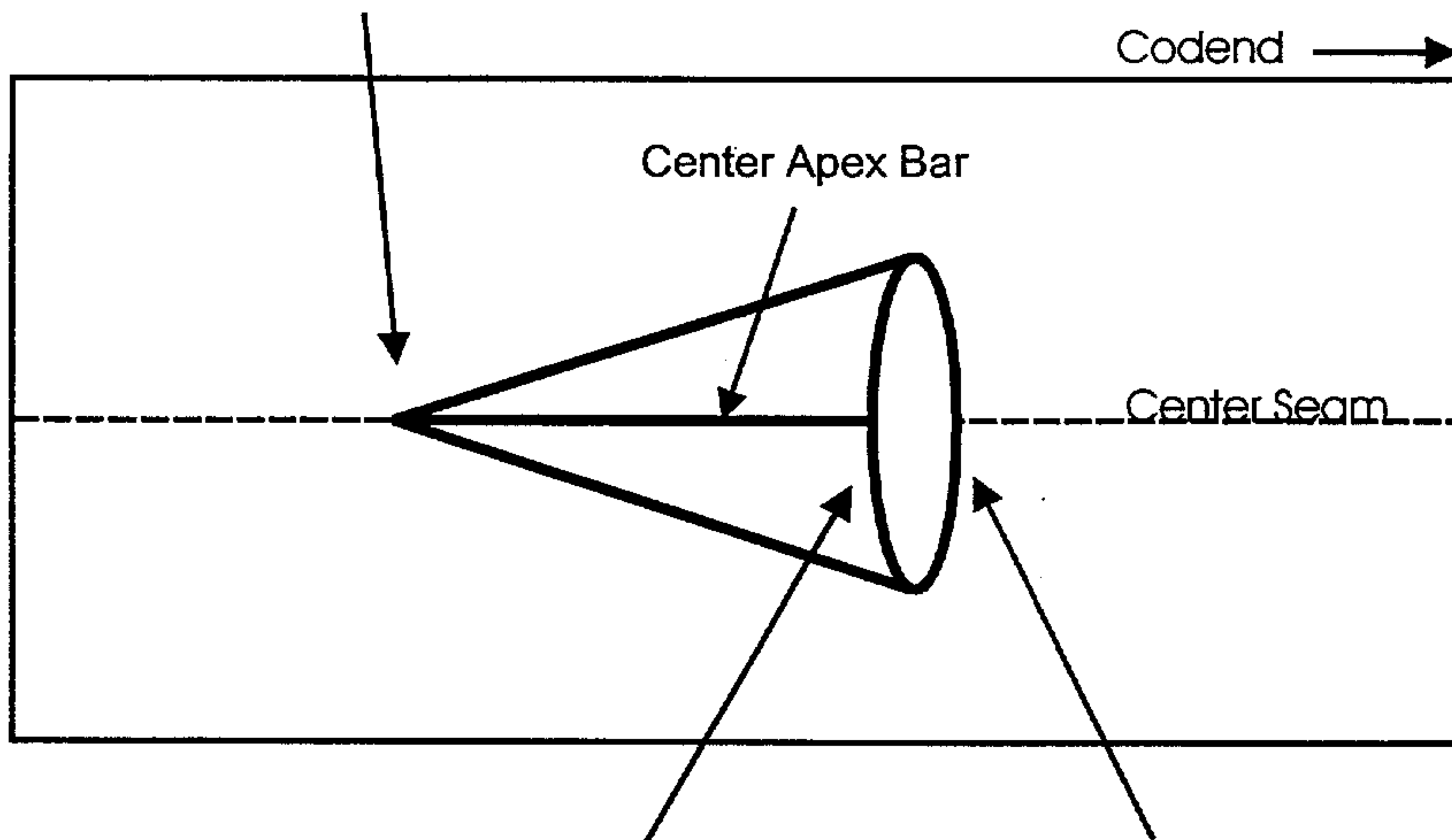


Figure 3.



Apex of the fisheye frame
faces forward



The forward side of exit opening cut
is attached to inner portion of
the fisheye frame

The aft side of exit opening cut
is attached to outer portion of
the fisheye frame

TECHNICAL SPECIFICATIONS AND MINIMUM REQUIREMENTS FOR THE EXTENDED FUNNEL, AND EXPANDED MESH BRDS

Extended Funnel Description

The extended funnel BRD consists of an extension with large mesh webbing in the center and small mesh webbing on each end held open by a semi-rigid hoop. A funnel of small mesh webbing is placed inside the large mesh section to form a passage for shrimp to the codend. It also creates an area of reduced water flow to allow for fish escapement through the large mesh. One side of the funnel is extended vertically to form a lead panel and area of reduced water flow. There are two sizes of extended funnel BRDs, a standard size and a smaller inshore size.

Minimum Construction and Installation Requirements

Extension Material - the small mesh used on both sides or the large mesh escape section is constructed from No. 30, 1-5/8 inch (stretch mesh) nylon webbing. The front section is 120 meshes around by 6 ½ meshes deep. The back section is 120 meshes around by 23 meshes deep.

Large Mesh Section - the large mesh escape section is constructed of 8- 10 inch stretch mesh webbing. This section is cut on the bar to form a section that is 15x95 inches in circumference. The leading edge is attached to the 6 ½ mesh extension section and the rear edge is attached to the 23 mesh extension section.

Funnel - the funnel is constructed of 1 ½ inch (stretch mesh) No. 30 depth stretched and heat set polyethylene webbing. The circumference of the leading edge is 120 meshes and the back edge is 104 meshes. The short side of the funnel is 34 to 36 inches long and half of the opposite side of the funnel extends an additional 22 to 24 inches. The leading edge of the funnel is attached 3 meshes forward of the large mesh leading edge. Seven meshes of the short side of the funnel is attached to the back section of extension webbing on the top and bottom 8 meshes back from the trailing edge of the large mesh section. The extended side of the funnel is attached on a slight angle to the top and bottom of the back extension webbing.

Semi-Rigid Hoop - A 30 inch diameter hoop constructed of plastic coated trawl cable swaged together is installed evenly 5 meshes behind the trailing edge of the large mesh section

Installation - the extended funnel BRD is attached behind a hard TED 8 inches behind the posterior edge with the codend attached to the trailing edge of the BRD. If a soft TED is used a second hoop must be installed in the front section of the BRD extension webbing at the leading edge of the funnel.

Minimum Construction and Installation Requirements for Inshore Size

Extension Material - the small mesh used on both sides of the large mesh escape section is constructed from No. 18, 1-38 inch (stretch mesh) nylon webbing. The front section is 120 meshes around by 6 ½ meshes deep. The back section is 120 meshes around by 23 meshes deep.

Large Mesh Section - the large mesh escape section is constructed of 8-10 inch stretch mesh webbing. This section is cut on the bar to form a section that is 15x75 inches in circumference. The leading edge is attached to the 6 ½ mesh extension and the rear edge is attached to the 23 mesh extension section.

Funnel - the funnel is constructed of 1 3/8 inch (stretch mesh) No. 18 depth stretched and heat set polyethylene webbing. The circumference of the leading edge is 120 meshes and the back edge is 78 meshes. The short side of the funnel is 30 to 32 inches long and half of the opposite side of the funnel extends an additional 20 to 22 inches. The leading edge of the funnel is attached 3 meshes forward of the large mesh leading edge. Seven meshes of the short side of the funnel is attached to the back section of extension webbing on the top and bottom 8 meshes back from the trailing edge of the large mesh section. The extended side of the funnel is attached on a slight angle to the top and bottom of the back extension webbing.

Semi-rigid Hoop - a 24 inch diameter hoop constructed of plastic coated cable swaged together is installed evenly 5 meshes behind the trailing edge of the large mesh section.

Installation - the extended funnel BRD is attached behind a hard TED 8 inches behind the posterior edge with the codend attached to the trailing edge of the BRD. If a soft TED is used a second hoop must be installed in the front section of the BRD extension webbing at the leading edge of the funnel.

Expanded Mesh Description

The expanded mesh BRD is constructed and installed exactly the same as the extended funnel BRD except the funnel is not extended to form the lead panel.

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November, 1996

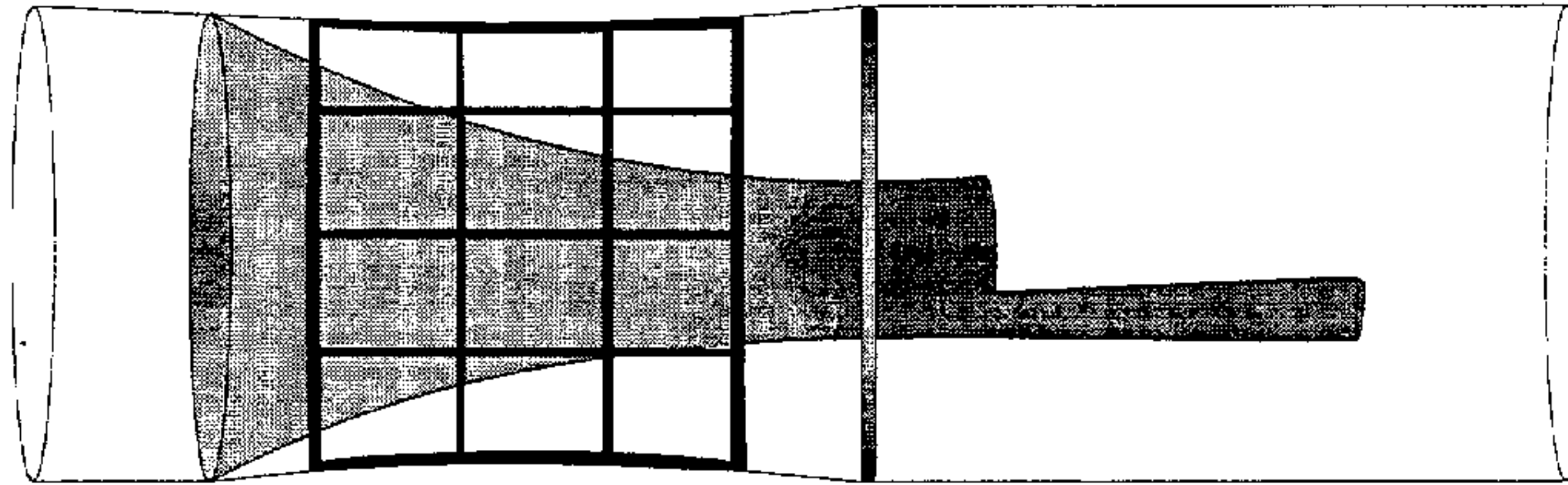


Figure 1.
Construction of the Webbing Extension and Large Mesh Section

The webbing extension is made from a single piece of 1 5/8" stretch mesh # 30 nylon twine, 30 meshes x 120 meshes. Form a tube from the extension webbing by sewing the 30 mesh sides together. The large mesh section is made by cutting a 3 mesh strip by 18 1/2 bars long from 10" by 10 mm PES webbing. Sew the narrow ends together to form a 3 square by 19 square (15" x 95") tube.

Figure 2. Attachment of Large Mesh to the Extension

Starting at the top center seam of the extension, count back 6 1/2 meshes and cut around the extension to divide it into two pieces. Attach the large mesh section to the 6 1/2 mesh piece (front) of the extension. The sewing sequence for attaching the large mesh section to the extension is 6 meshes to one large mesh, 6 meshes to one large mesh and 7 meshes to one large mesh. Repeat this sewing sequence until you are all the way around the large mesh piece. Repeat the sewing sequence when attaching the other end of the large mesh section to the 23 mesh extension section.

Figure 3. 30" Hoop Ring

A single hoop is constructed of 1/2" plastic coated cable 94 1/4" in length. It is joined by a 3/8" micropress sleeve. Starting at the top center seam of the 23 mesh extension section (back section) count back 5 meshes then attach the extension to the 30" ring. Then count 60 meshes around the extension to find the bottom center attachment point. Starting at the top center then count 30 meshes on each side of the extension to find the side attachment points. Finding these points is necessary to insure that the extension webbing is equally distributed around the ring. When the four attachment points are located and attached to the ring, lace the extension webbing to the ring around the entire circumference.

Figure 4. Construction of the Funnel

The funnel is constructed from 4 sections of 1 ½", number 30, depth stretched and heat set polyethylene webbing. The two side sections are rectangular in shape with one side being 29 ½ meshes on the leading edge by 38 ½ meshes deep and the other 29 ½ meshes on the leading edge by 23 meshes deep. The top and bottom sections are 29 ½ meshes on the leading edge by 23 meshes deep and tapered 1 point 2 bars on both sides down to 8 meshes across the back. The four sections are sewn together to form the funnel.

Figure 5. Attachment of the Funnel in the Extension

The funnel is installed inside the extension 3 meshes forward of the large mesh. Beginning at the seam of the extension webbing and the middle of the leading edge of the top funnel section, sew the funnel to the extension mesh for mesh. The back edge of the top and bottom sections are attached 3 meshes behind the soft cable hoop at the top and bottom of the extension webbing. The longer side section of the funnel is attached to the extension webbing on the top and bottom. Beginning at the back edge of the top and bottom section, attach the remainder of the long side panel by sewing 2 meshes straight and one mesh in on the extension webbing. This angles the extended side panel in toward the center of the extension webbing.

Figure 1.

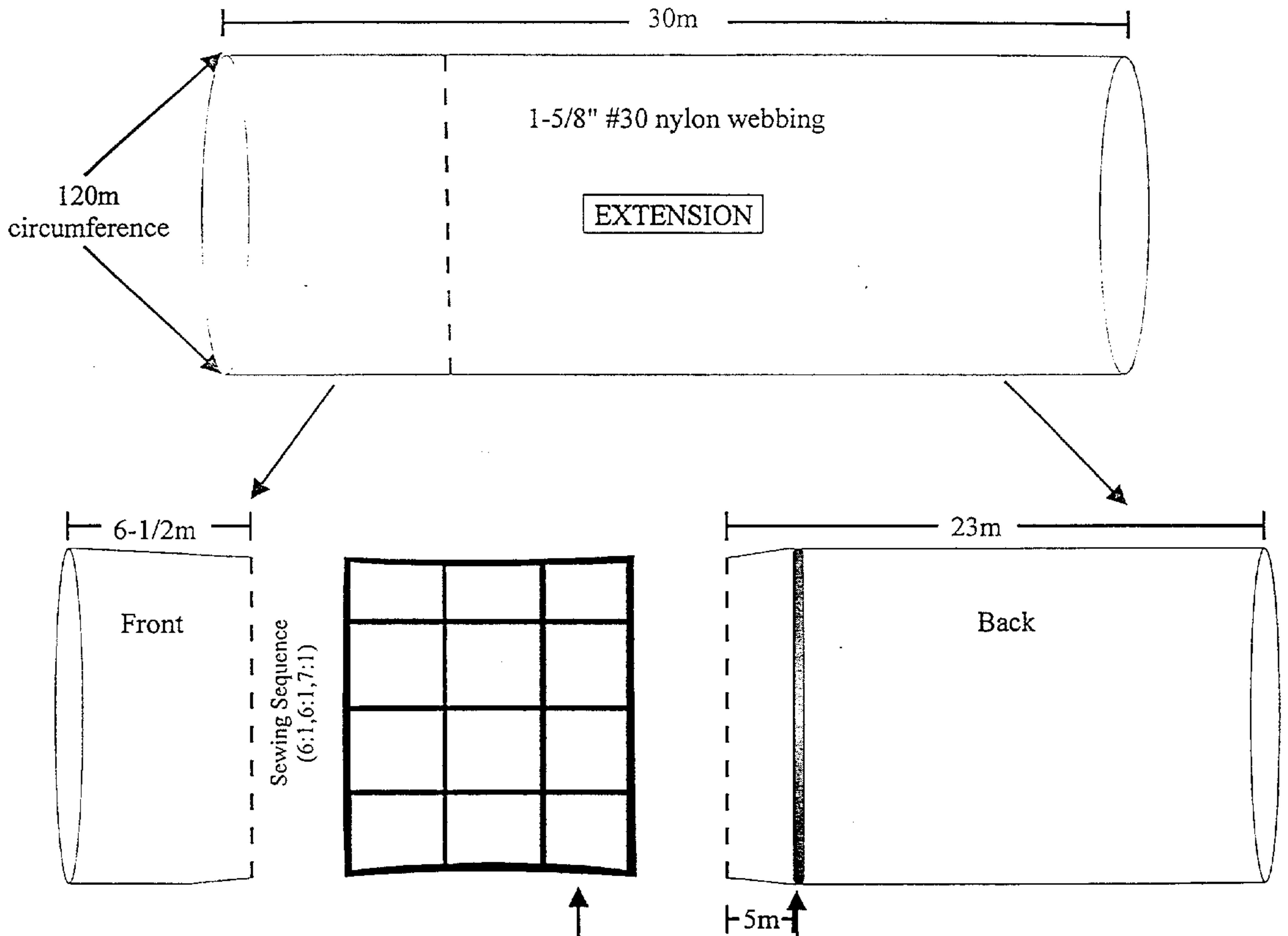
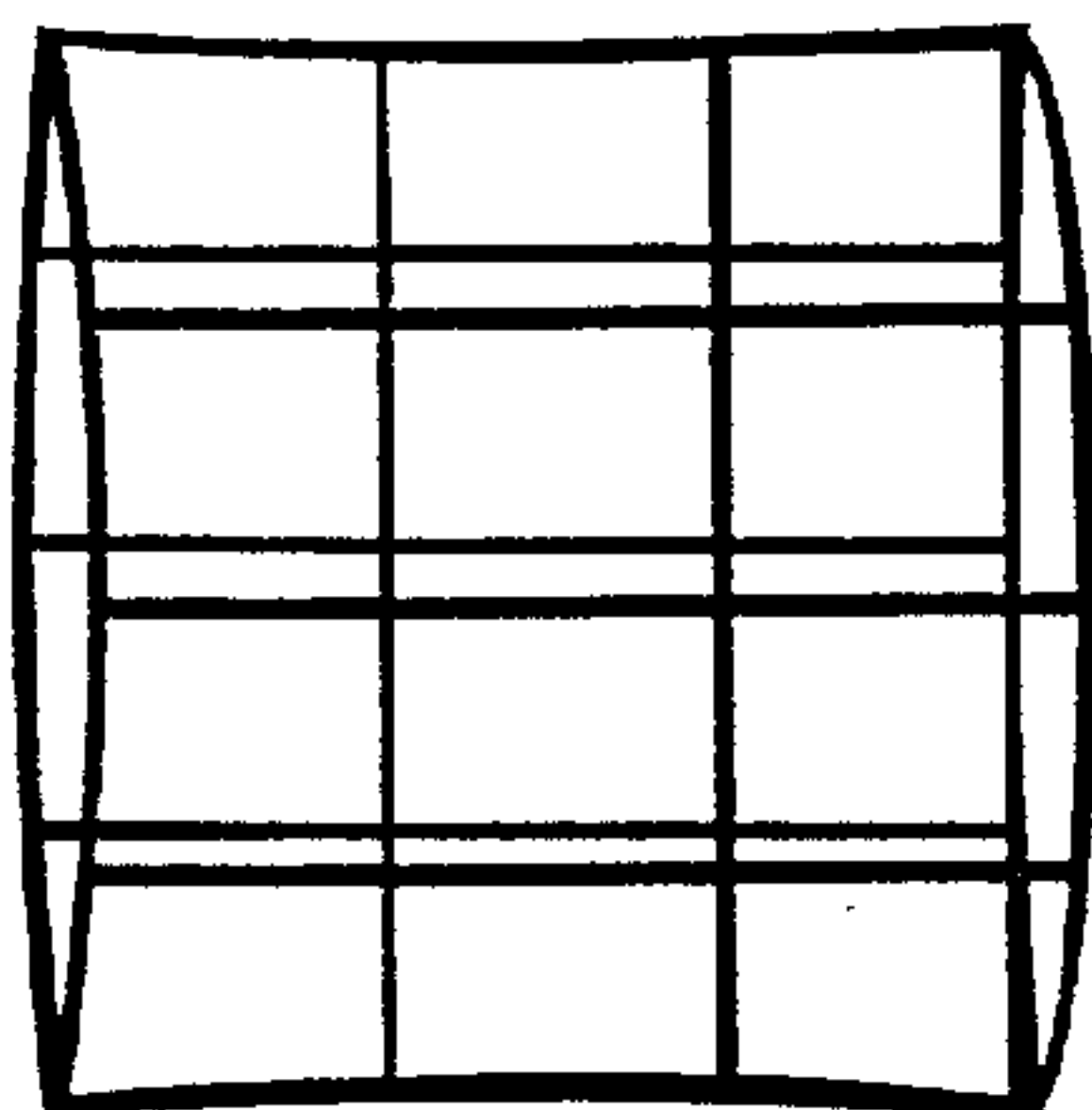
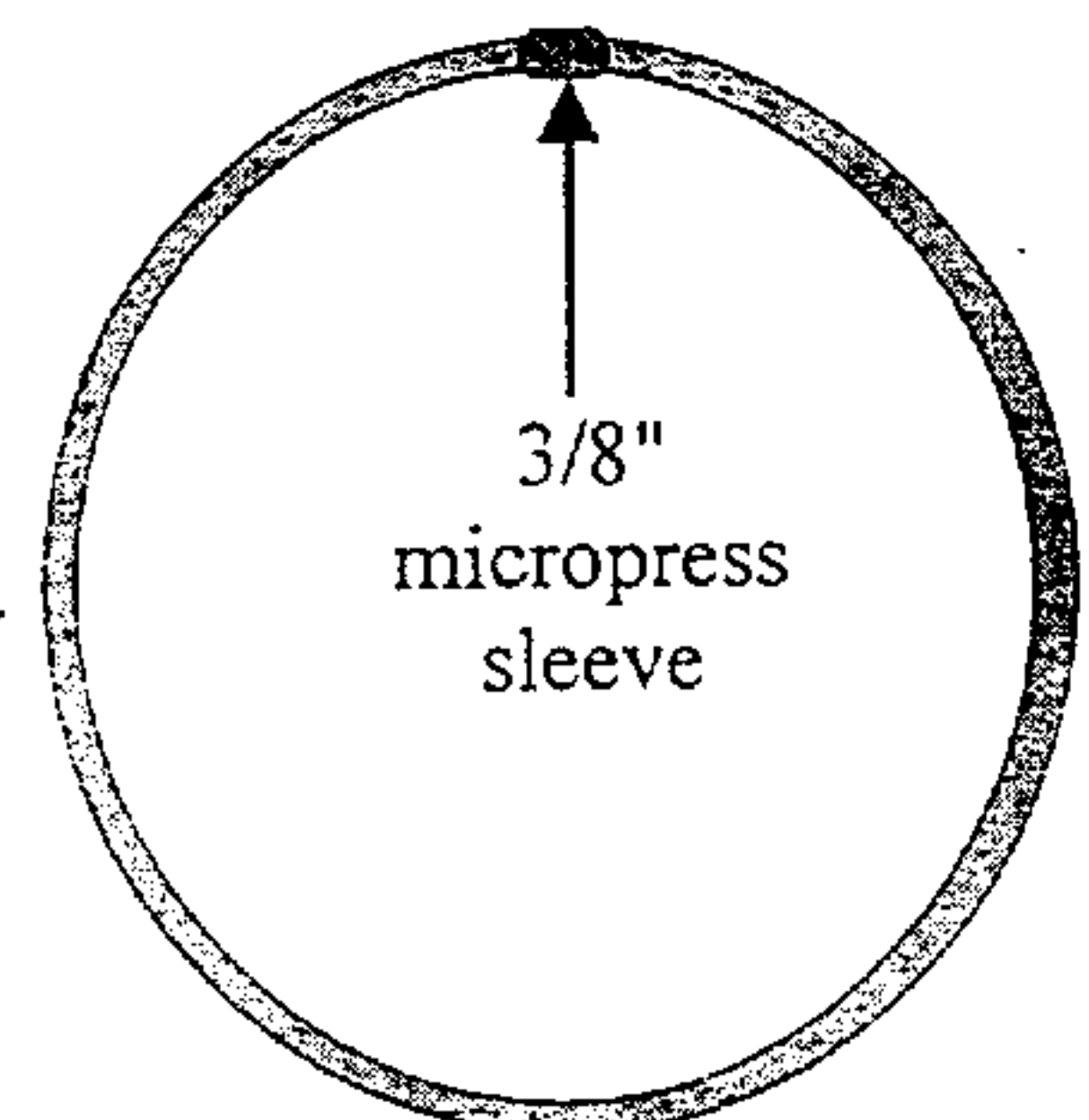


Figure 2.



Large Mesh
10" x 10mm polyester

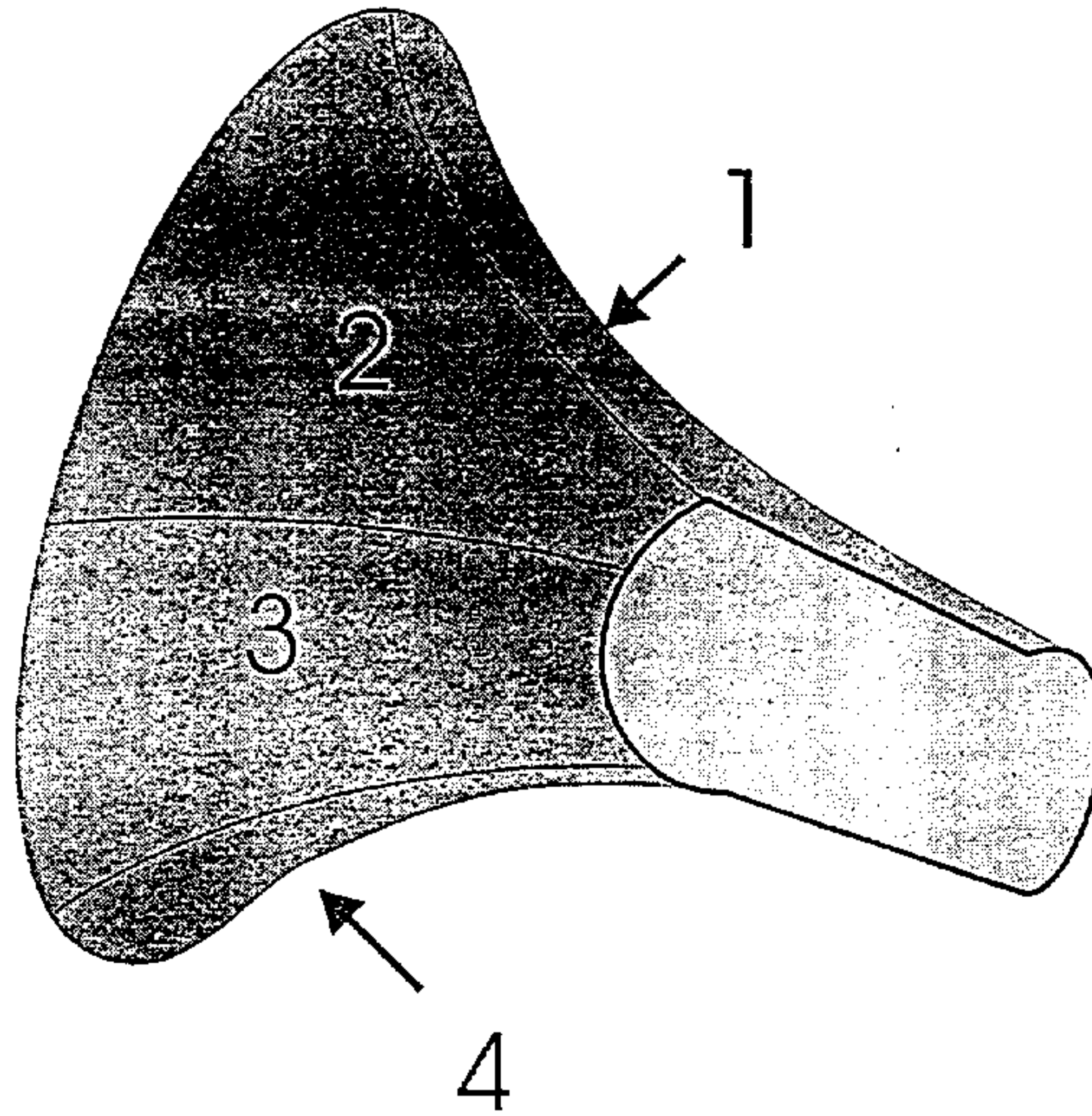
Figure 3.



1/2" plastic coated cable
ring circumference 94-1/4"

Figure 4

Funnel

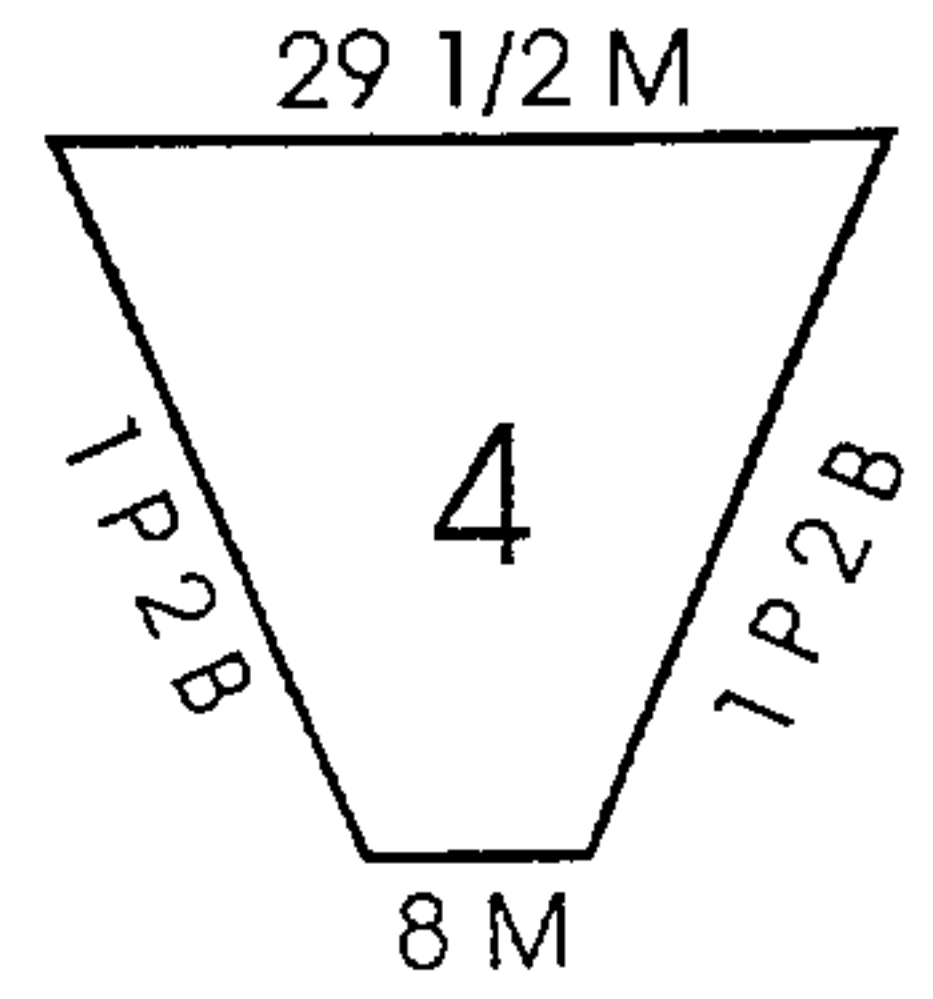
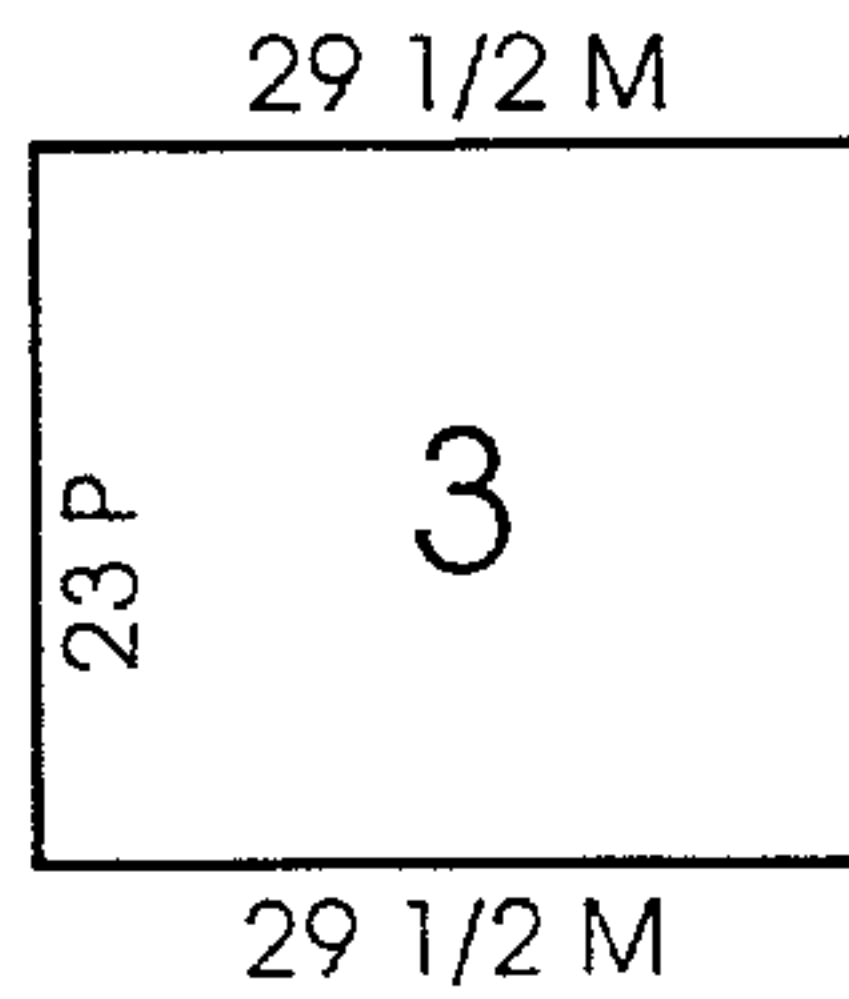
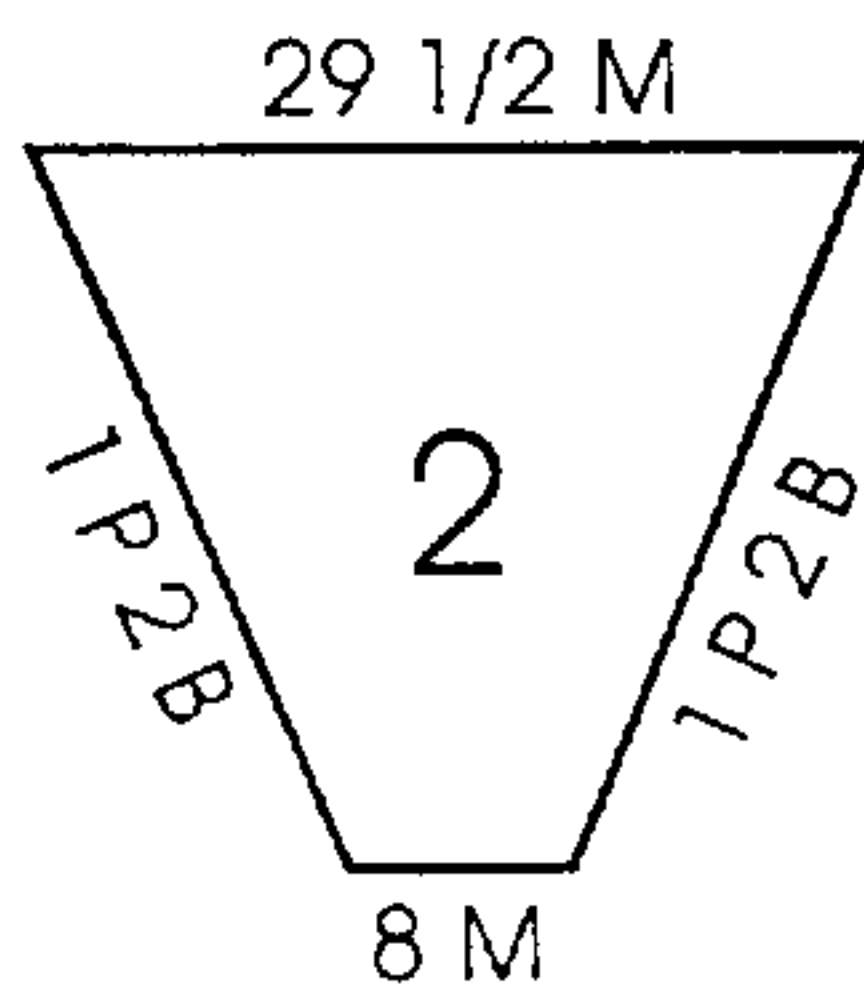
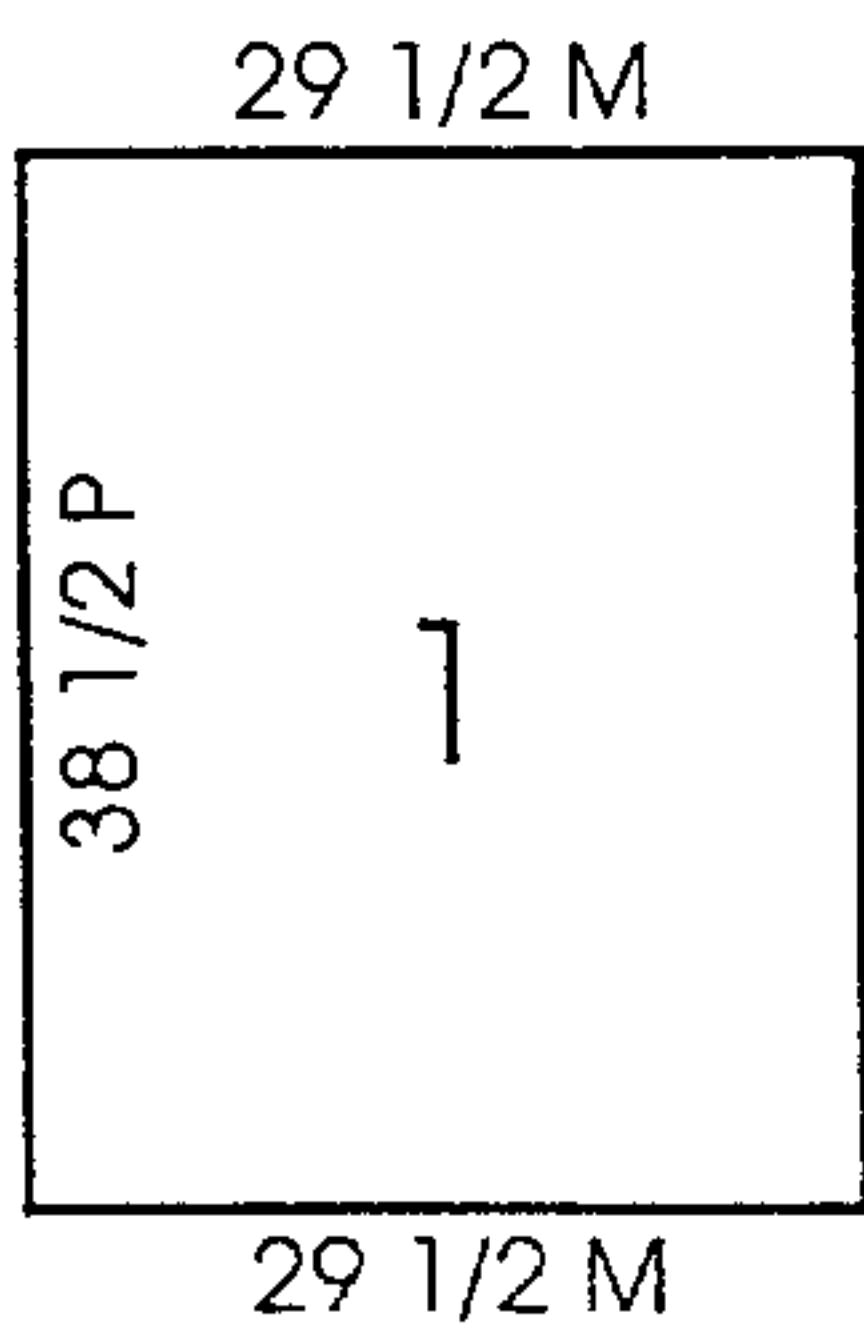


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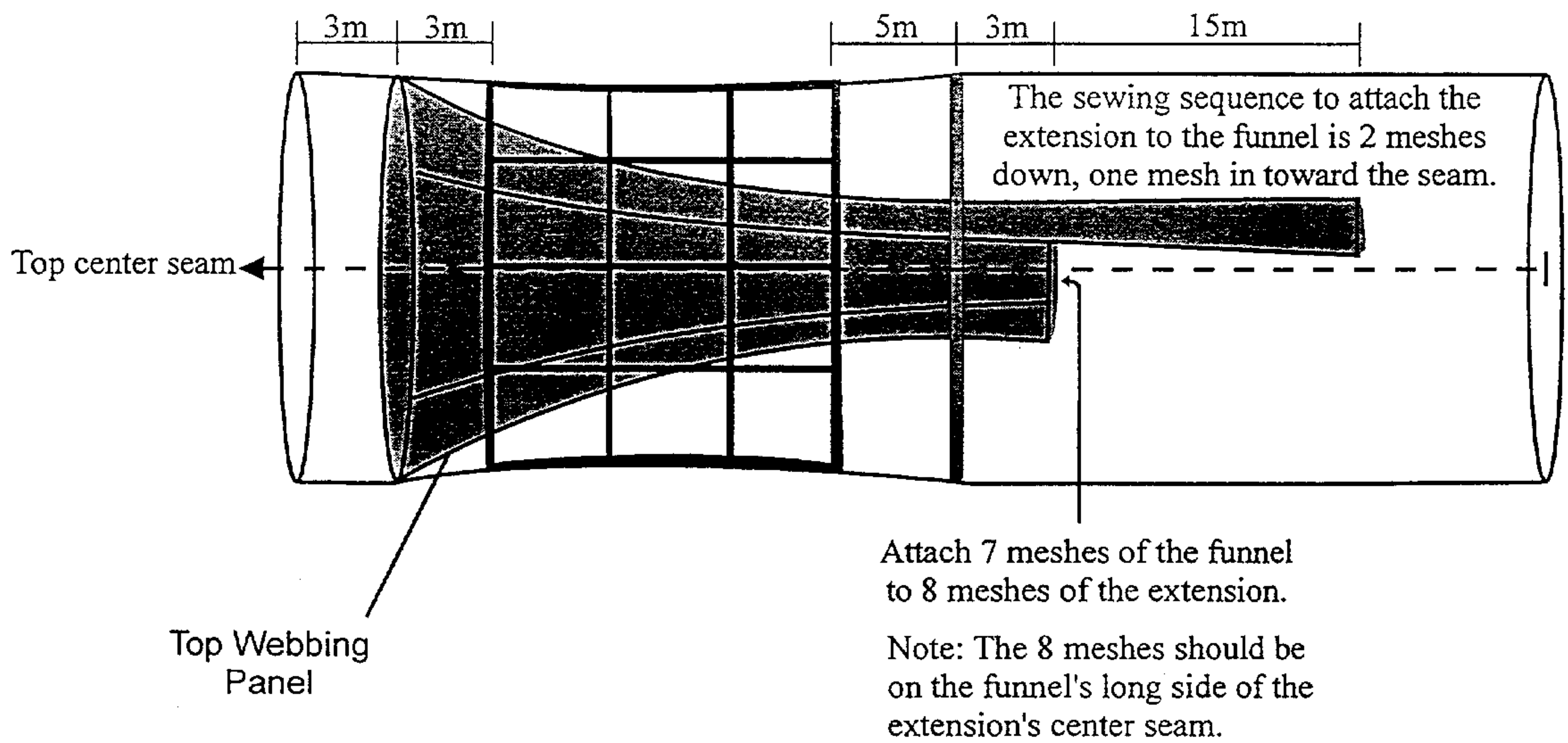
Bottom



Webbing Panels

Figure 5.

Top View



INSTRUCTIONS FOR INSHORE LARGE MESH & EXTENDED FUNNEL BRD
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November, 1996

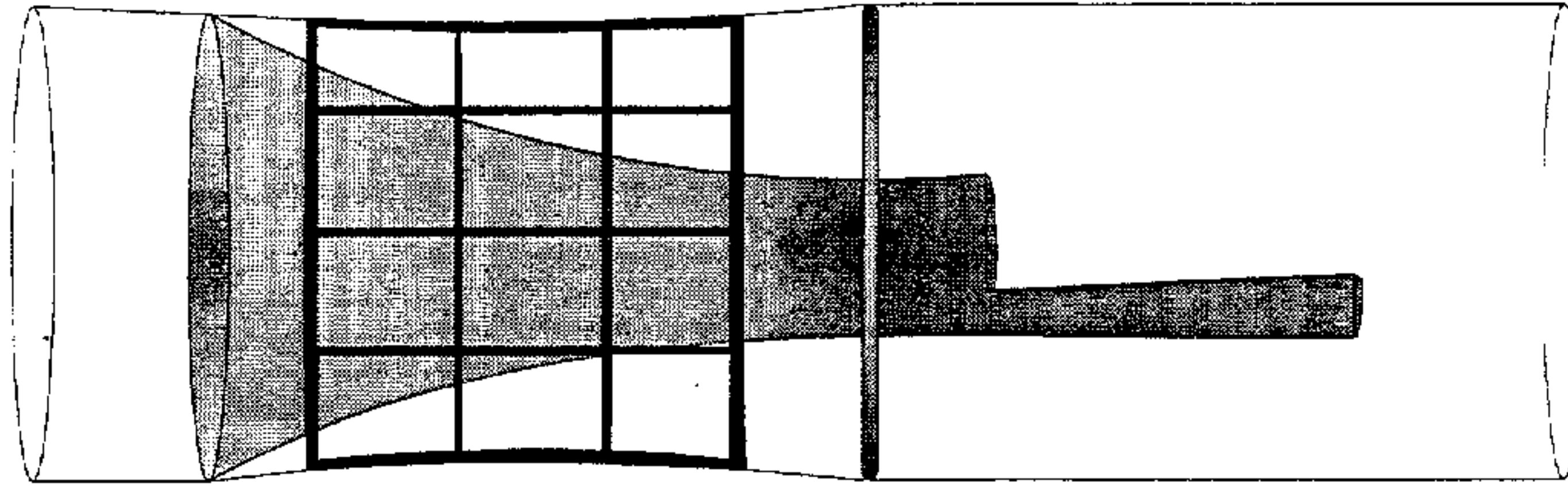


Figure 1. Construction of the Webbing Extension and Large Mesh Section

The webbing extension is made from a single piece of 1 3/8" stretch mesh # 18 nylon twine, 30 meshes x 120 meshes. Form a tube from the extension webbing by sewing the 30 mesh sides together. The large mesh section is made by cutting a 3 mesh strip by 14 1/2 bars long from 10" by 10 mm PES webbing. Sew the narrow ends together to form a 3 square by 15 square (15" x 75") tube.

Figure 2. Attachment of Large Mesh to the Extension

Starting at the top center seam of the extension, count back 6 1/2 meshes and cut around the extension to divide it into two pieces. Attach the large mesh section to the 6 1/2 mesh piece (front) of the extension. The sewing sequence for attaching the large mesh section to the extension is 8 meshes to one large mesh. Repeat this sewing sequence until you are all the way around the large mesh piece. Repeat the sewing sequence when attaching the other end of the large mesh section to the 23 mesh extension section.

Figure 3. 24" Hoop Ring

A single hoop is constructed of 3/8" plastic coated cable 75 1/2" in length. It is joined by a 5/16" nicropress sleeve. Starting at the top center seam of the 23 mesh extension section (back section) count back 5 meshes then attach the extension to the 24" ring. Then count 60 meshes around the extension to find the bottom center attachment point. Starting at the top center then count 30 meshes on each side of the extension to find the side attachment points. Finding these points is necessary to insure that the extension webbing is equally distributed around the ring. When the four attachment points are located and attached to the ring, lace the extension webbing to the ring around the entire circumference.

Figure 4. Construction of the Funnel

The funnel is constructed from 4 sections of 1 3/8", number 18, depth stretched and heat set polyethylene webbing. The two side sections are rectangular in shape with one side being 29 ½ meshes on the leading edge by 38 ½ meshes deep and the other 29 ½ meshes on the leading edge by 23 meshes deep. The top and bottom sections are 29 ½ meshes on the leading edge by 23 meshes deep and tapered 1 point 2 bars on both sides down to 8 meshes across the back. The four sections are sewn together to form the funnel.

Figure 5. Attachment of the Funnel in the Extension

The funnel is installed inside the extension 3 meshes forward of the large mesh. Beginning at the seam of the extension webbing and the middle of the leading edge of the top funnel section, sew the funnel to the extension mesh for mesh. The back edge of the top and bottom sections are attached 3 meshes behind the soft cable hoop at the top and bottom of the extension webbing. The longer side section of the funnel is attached to the extension webbing on the top and bottom. Beginning at the back edge of the top and bottom section, attach the remainder of the long side panel by sewing 2 meshes straight and one mesh in on the extension webbing. This angles the extended side panel in toward the center of the extension webbing.

Figure 1.

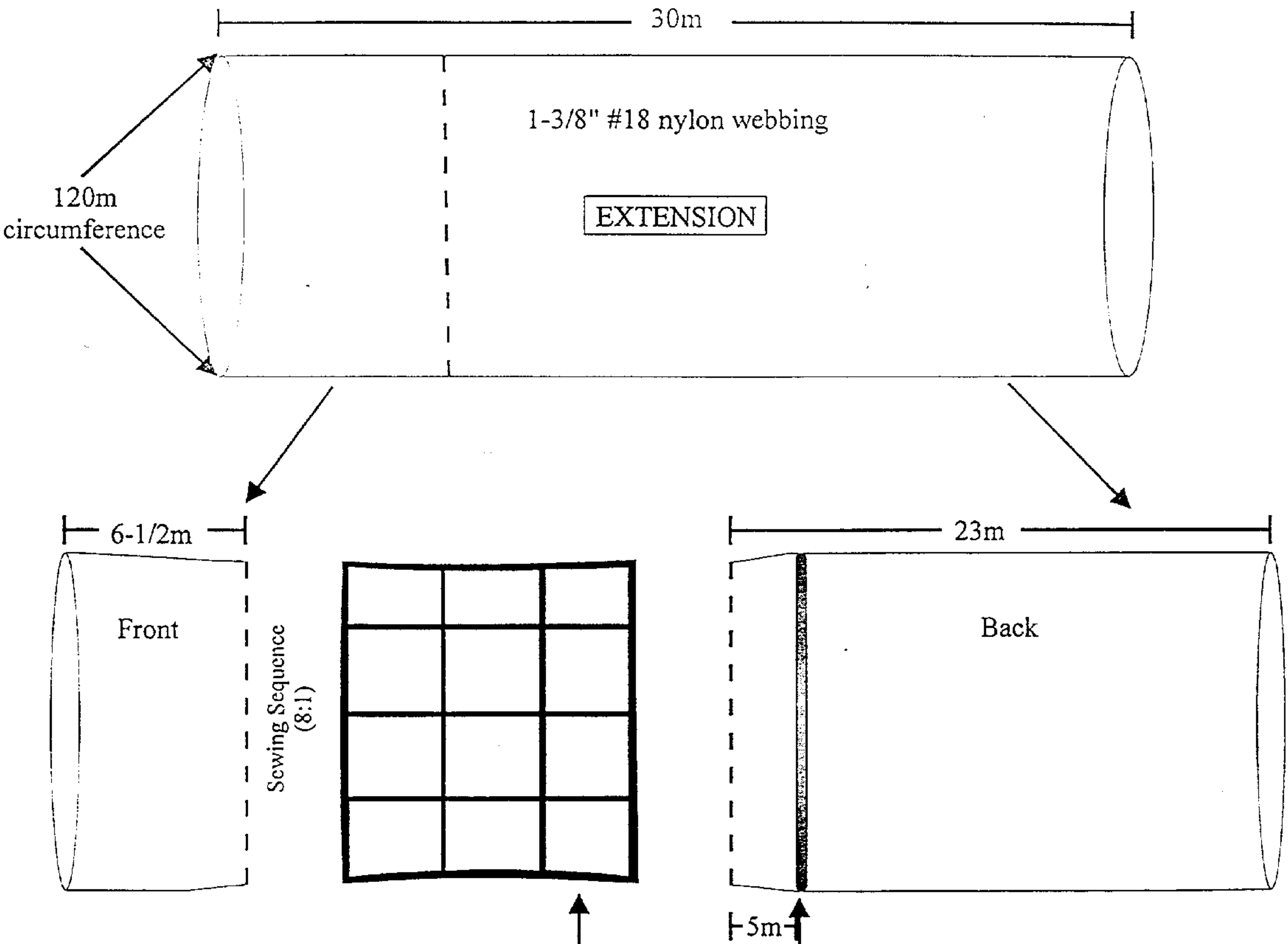
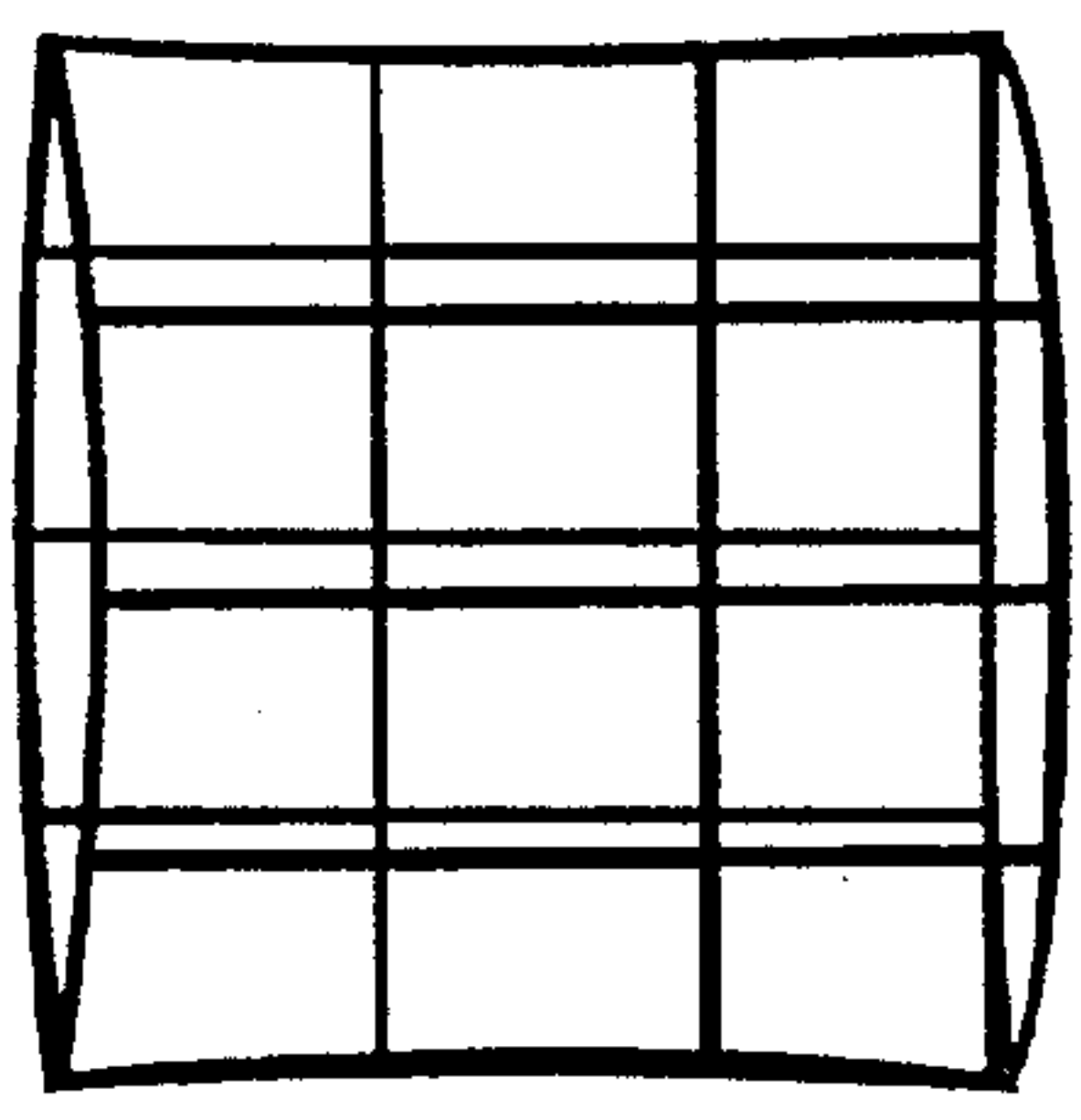
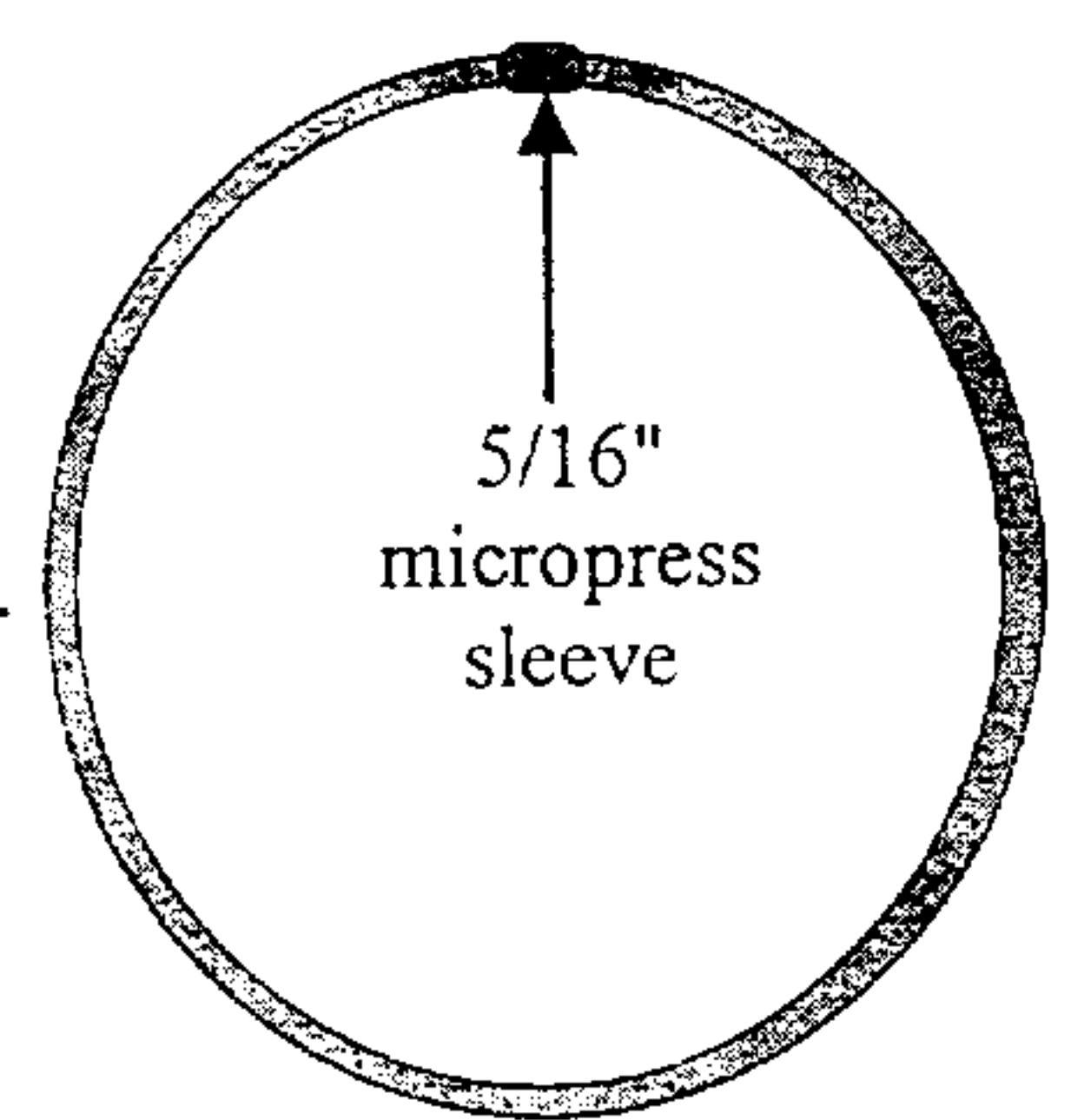


Figure 2.



Large Mesh
10" x 10mm polyester

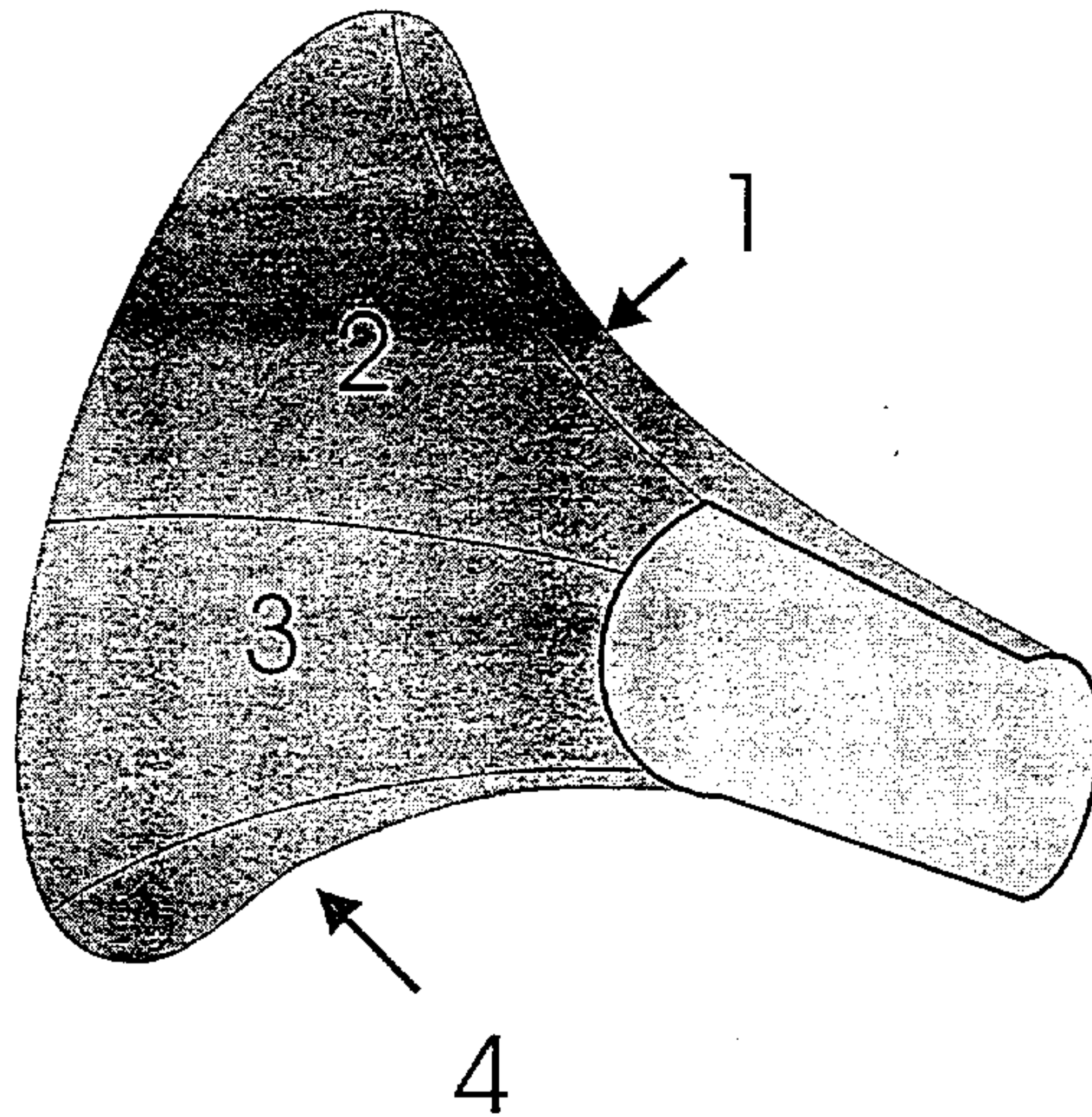
Figure 3.



3/8" plastic coated cable
ring circumference 75 1/2"

Figure 4

Funnel

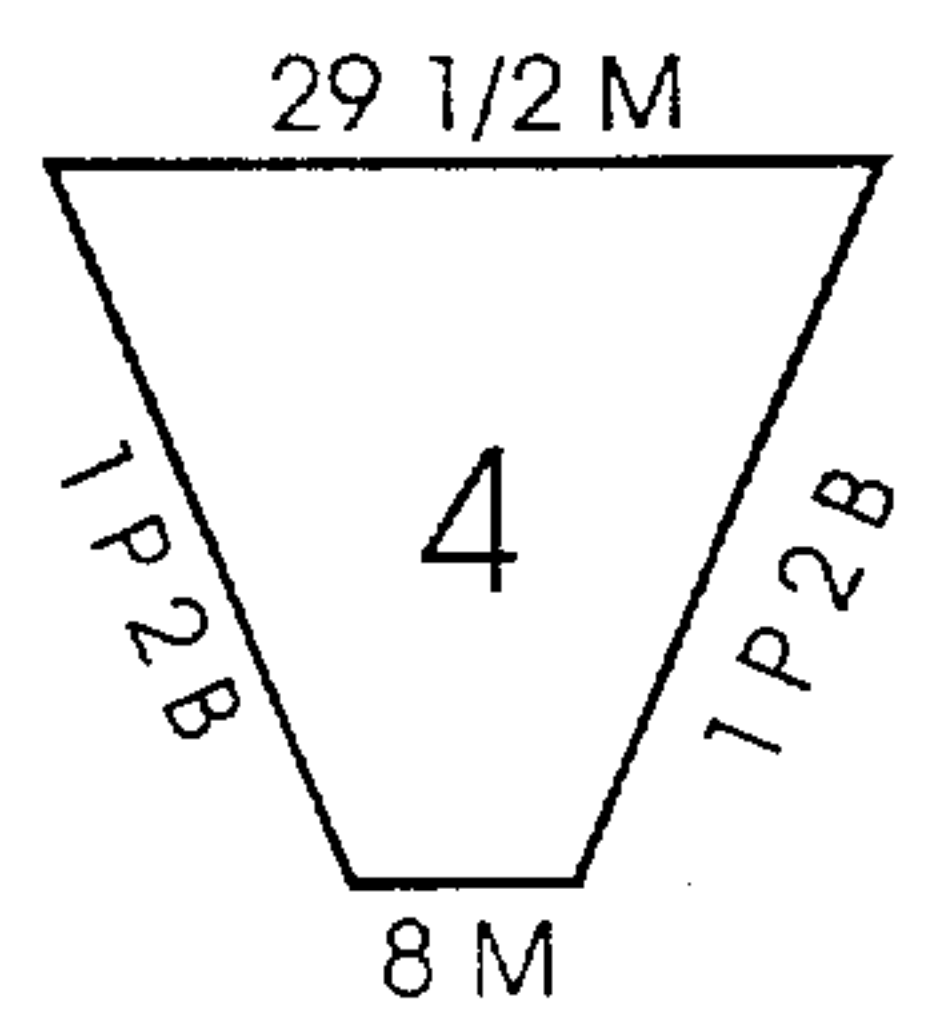
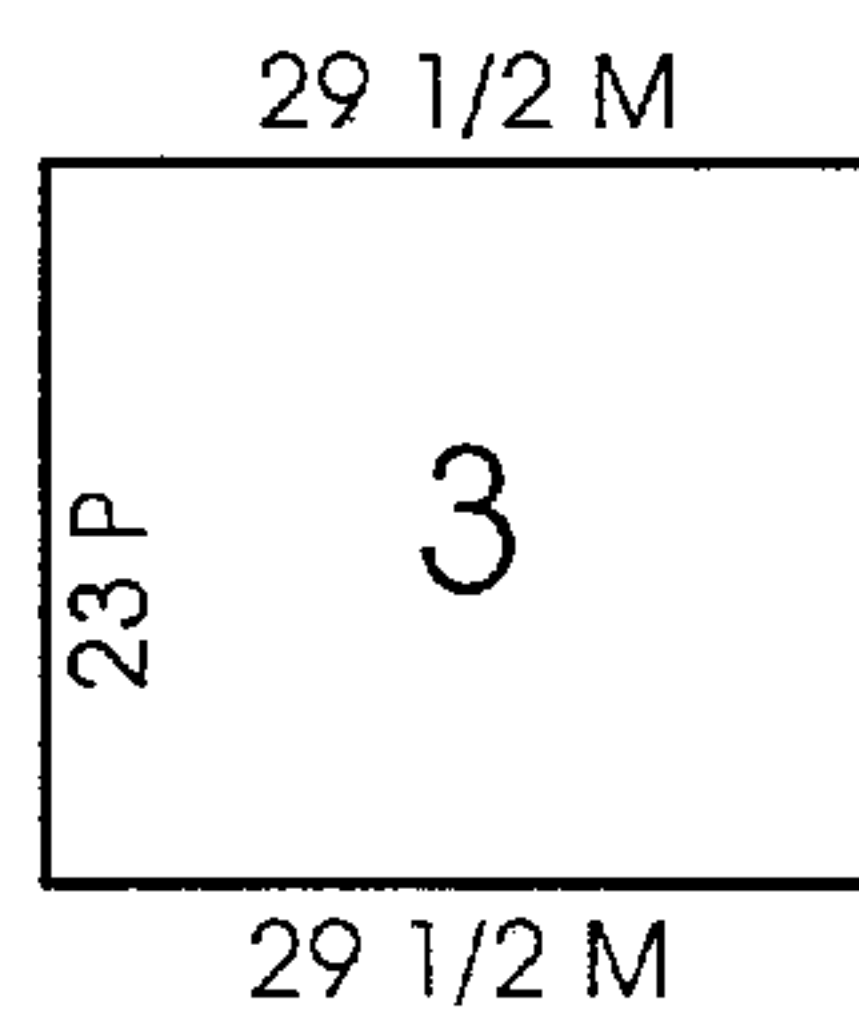
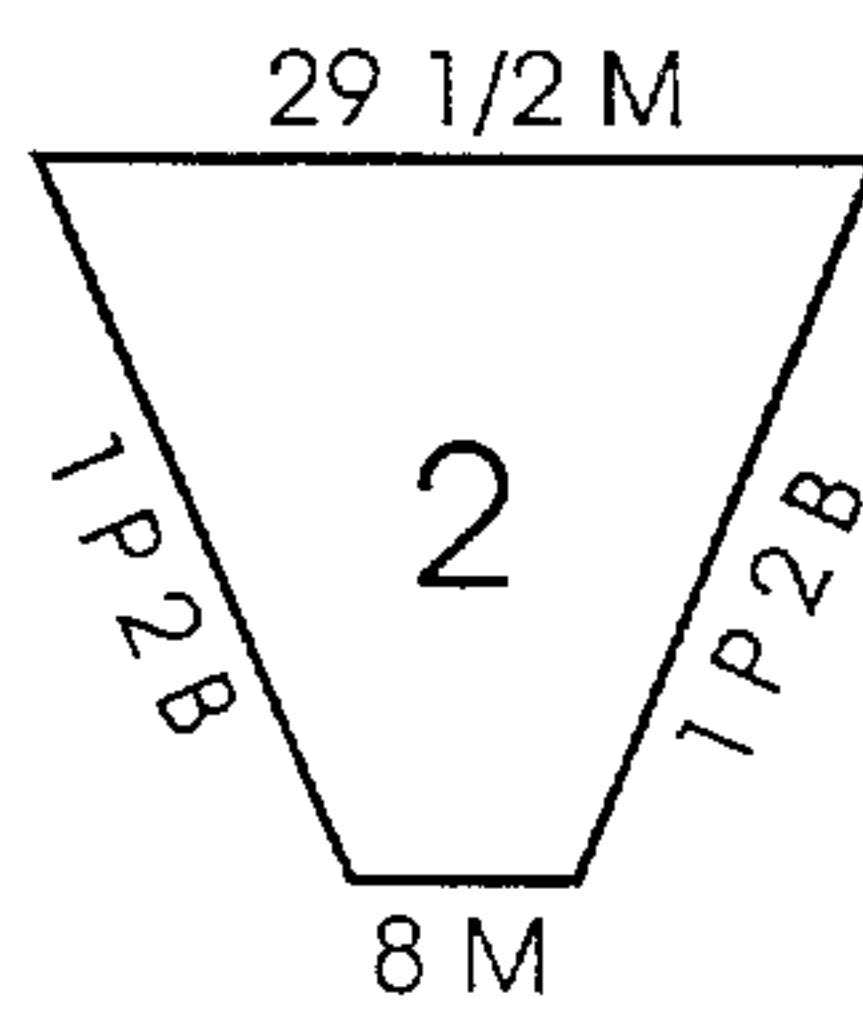
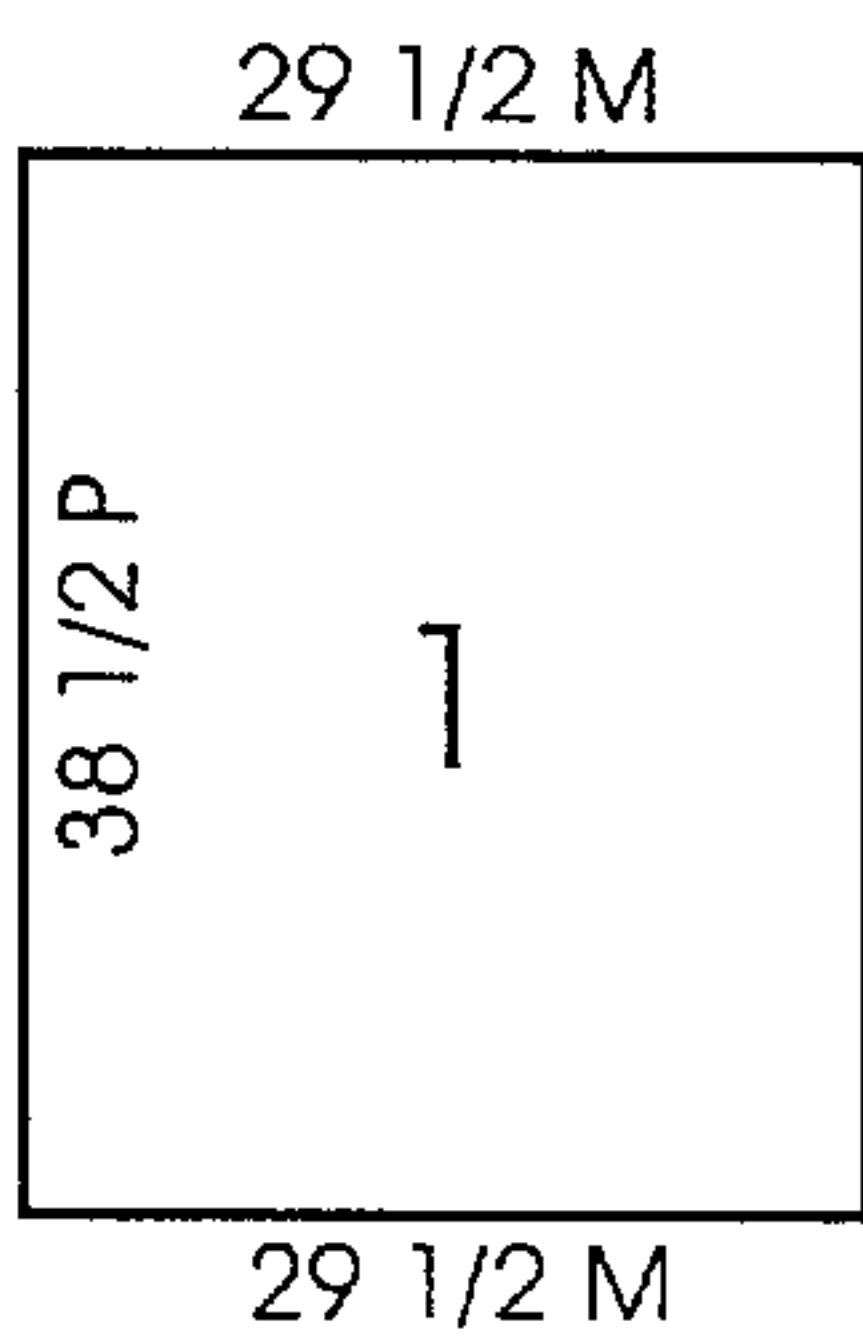


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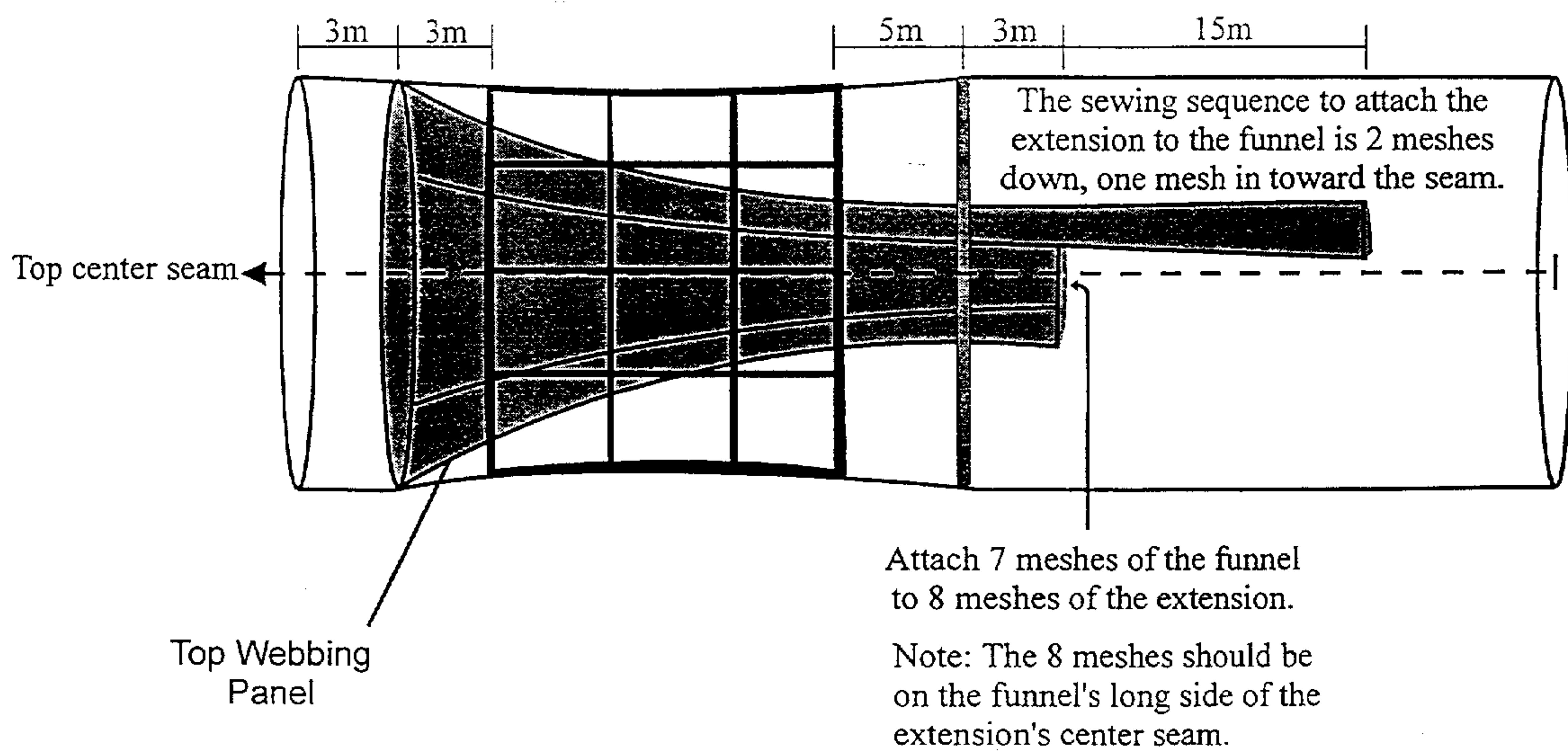
Bottom



Webbing Panels

Figure 5.

Top View



SECTION 4: SHRIMP FISHERY BYCATCH REFERENCES

compiled by Eduardo X. Martinez

**U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE
SOUTHEAST FISHERIES SCIENCE CENTER
GALVESTON LABORATORY
4700 AVENUE U
GALVESTON, TX 77551**

This section details publications, reports, products, and projects that are associated with, used data from, or simply discussed the bycatch issues in the southeastern shrimp trawl fishery. Although this list is extensive, it may not be complete, and any omissions or errors are attributed to the difficulty in documenting the status of the gray literature.

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